

Let's EDIT 2

Realtime Video Editing with Movie-style Effects



User's Manual

Fun, fast easy-to-use editing
and DVD creation



Let's
CREATE

canopus®

Let's EDIT 2

User's Manual

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Canopus Co.,Ltd.
1-2-2 Murotani, Nishi-ku, Kobe,
Hyogo 651-2241, Japan

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Let's EDIT 2

Chapter 1

Introduction

Canopus Worldwide

Canopus Corporation

711 Charcot Avenue, San Jose, CA95131, USA

Canopus GmbH

Bergstrasse 16-18, D-56412 Ruppach-Goldhausen, Germany

Canopus U.K.

Unit 4, The Duran Centre, 14 Arkwright Road, Reading RG2 0LS, UK

Canopus Italy (c/o Rekeo Srl)

Via Monte Sabotino 69, 41100 Modena - Italy

Canopus China and South Asia -Beijing

Room 910, No. 33, Su Zhou Street, Beijing, 100080, China

Canopus Australia

7 Dene Avenue, Malvern East, Victoria 3145, Australia

For more information about products and services, visit the Canopus worldwide website at <http://www.canopus.com>

Manual summary

Chapter 1 - Introduction

Provides information about contacting us and using this manual.

Chapter 2 - QuickStart

Walks through a simple production from capturing to editing to output.

Chapter 3 - Using Let's EDIT 2

Provides a detailed look at the Let's EDIT 2 applications for editing.

Chapter 4 - Transition Settings

Provides explanations of the settings for the Canopus realtime transitions.

Chapter 5 - Video Filter Settings

Describes each Canopus realtime video filter and its options.

Chapter 6 - Audio Filter Settings

Describes each Canopus realtime audio filter and its options.

Chapter 7 - Techniques

Step-by-step techniques and examples of things you can do with your Canopus hardware.

Manual conventions

The following conventions are used throughout this manual:

> **Bold** usually indicates software menu commands

File>Open

> *Italic* is used for emphasis and naming

> [square brackets] refer to software messages to you

“Info” notifies you to write down parameters or make note of manual suggestions.



Info



Warning



Tips

“Warning” means to take care in avoiding physical injury or damage to the computer or peripherals.

“Tips” offers you some useful information of using Let’s EDIT 2 application.

Trademarks

Let’s EDIT 2 is a trademark of Canopus Co.,Ltd. i.LINK is a trademark of Sony Corporation.

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Adobe Acrobat Reader is required to view the “Let’s EDIT 2 User’s Manual” (PDF) contained on the Let’s EDIT 2 CD-ROM. It can be freely downloaded from the Web site of Adobe Inc. (<http://www.adobe.com>)

Let's EDIT 2

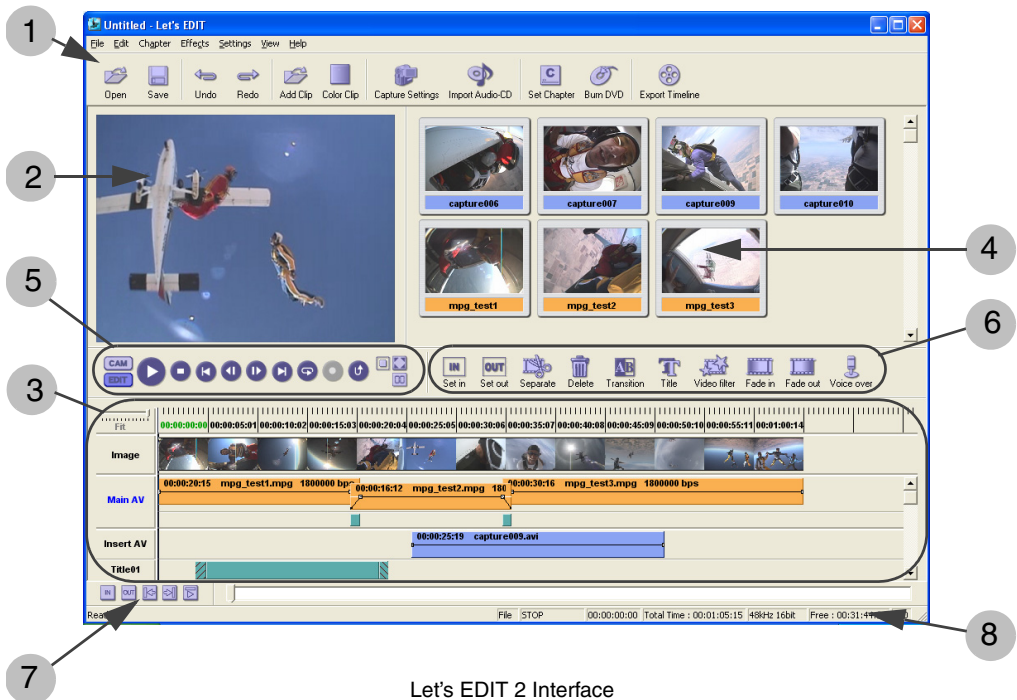
Chapter 2

QuickStart

This chapter lets you edit your first project quickly and easily.

The Let's EDIT 2 Interface

The Let's EDIT 2 application allows you to edit and output your captured video. It provides playback of video on the computer screen, titling, transitions, camera/deck control, and output capabilities.



Let's EDIT 2 Interface

The Let's EDIT 2 window consists of eight main sections:

1. **Main Toolbar** — Includes shortcut buttons for commonly used menu items.
2. **Preview window** — Provides a visual preview of video projects currently being worked on. Effects, filters, transitions and titles will appear instantly when applied to your video projects. In addition, realtime preview enables you to get instant feedback when customizing any particular effect.
3. **Timeline** — This section is a linear representation of a video project with several tracks for different media types (audio, video, titles). Clips appear as colored blocks on the different tracks and can be trimmed, repositioned, copied and deleted. Changing the default editing settings allows for more title and audio tracks to be added (up to 10 of each).

4. **Bin** — This large section is where all the various media clips such as audio, video and pictures can be stored for usage in a video project. The Bin also has a secondary function as a storyboard, in which the ordering of clips can assist with the quick creation of a project.
5. **Control Toolbar** — Contains the buttons to control the connected DV device. Switching the **CAM** and **EDIT** buttons, you can control not only the connected DV device but also the video project you are editing.
6. **Edit Toolbar** — Buttons to use when you edit your video project, such as trimming, adding transition, editing title data and recording voiceover, etc.
7. **Marker Control Toolbar** — Buttons to utilize Mark IN/OUT functions, such as setting, jumping and playing back.
8. **Status bar** — Displays the information on the DV device, timeline, button functions the mouse cursor is over, and the free space for the disk you have set temporary folder through the Default Edit Setting.

Basic steps in video production

To help you learn the software quickly, this chapter will take you through the steps necessary to do a simple editing project. For more detailed explanations of the programs and procedures in this chapter, please refer to the individual chapters later in this manual.

Watch for the info symbol throughout the chapter. It will tell you where to look for further information about the steps described.



Info

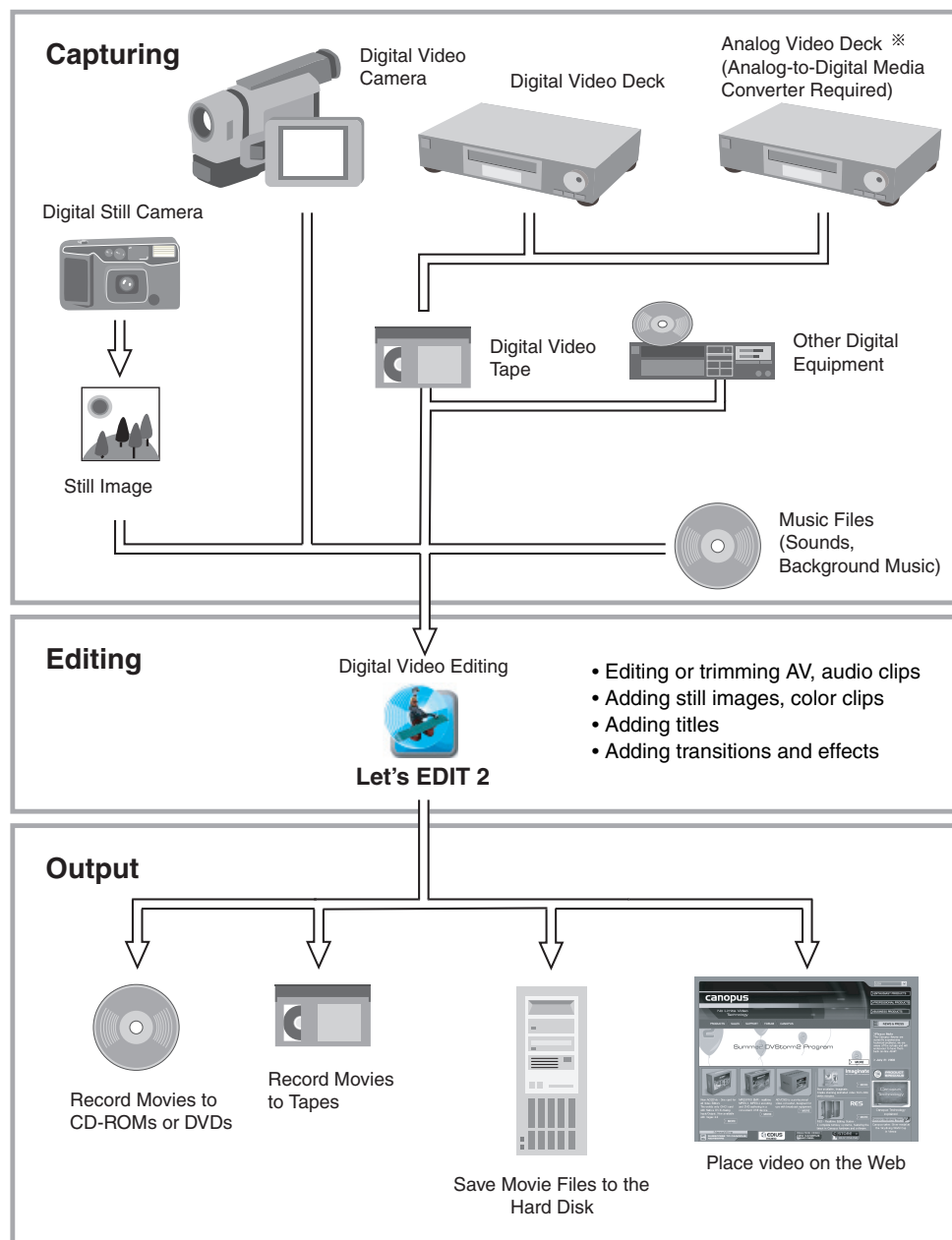
See your User Guide for your OHCI hardware for information about connecting video equipment to your system.

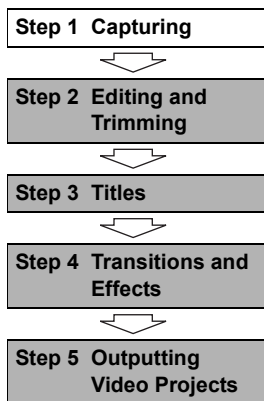
For this quickstart tutorial, you will need the following items:

1. DV, DVCAM or Digital 8 camera/deck connected in VTR mode.
2. DV, DVCAM or Digital 8 tape (whichever is appropriate for your device) with some video footage on it (a few minutes at least).

The video editing process involves three steps: Capuring (or Acquisition), Editing, and Output.

Basic steps in video production with Let's EDIT 2





Step 1 Capturing Video

Before you can edit your video, you need to capture (transfer) the video to your computer.

Let's EDIT 2 captures video not only in the Microsoft Video for Windows (AVI) format but in MPEG format.

You can manually capture video in Let's EDIT 2, as well as output video from Let's EDIT 2.

Setting Temporary Drives

The temporary drives are where captured AV files, output media files and rendered (processed) effects are stored.

C:\Lets-Temp, which is automatically created when you install the Let's EDIT 2 application, is selected by default.

Since you only need to set the temporary drives once, we'll set them now.

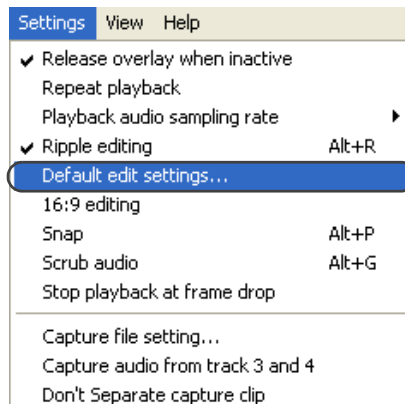
To set the Temporary drives, follow these steps.

1. Choose **Default edit settings...** from the Settings menu.



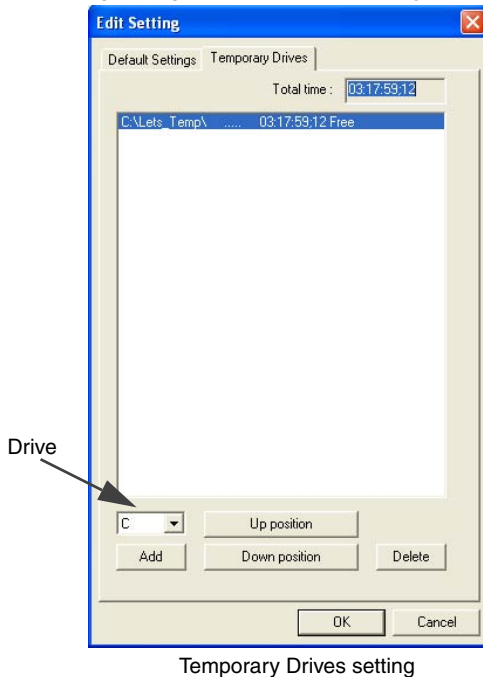
Tips

The default temporary folder is located on the C drive, however, we recommend you select a drive other than the system drive where your operating system is installed.

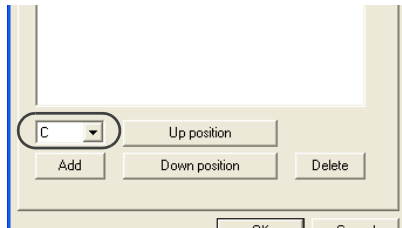


Choose Default edit settings from the Settings menu

2. In the Edit Setting dialog, select the **Temporary Drives** tab.



3. Select your video drive from the Drive drop-down.
4. Click the **Add** button. The drive you specified will appear in the list. If you have multiple video drives, you can add them here and as each gets filled, the next one will be used.



5. Once you set the temporary drives, Let's EDIT 2 will remember the setting until you uninstall or reinstall the software.
6. Click the **OK** button to close the Edit Settings dialog.

Manual capture

Let's EDIT 2 allows you to take footage shot with a DV camcorder or deck and capture it on your computer for editing. Let's EDIT 2 hardware products can also capture from analog devices such as Hi8 cameras or VHS decks.

Capturing footage can be done in a number of ways with Let's EDIT 2. The simplest method is to connect the DV camcorder to a FireWire port and switch it to VCR mode. Then you can control the camcorder using the Let's EDIT 2 software's device control panel.

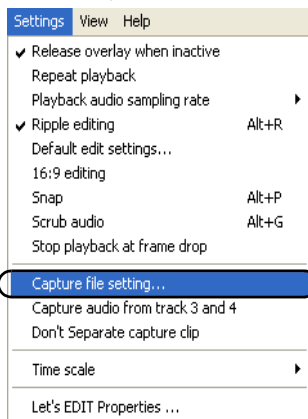


To start capturing, simply cue the camcorder's tape to the desired start position using the **Rewind** and **Fast Forward** button. Click the Record button to start capturing.

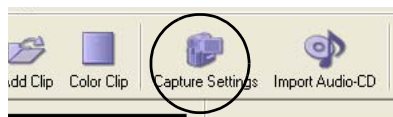
Let's EDIT 2 starts capturing footage to a temporary drive on your computer's hard disk drive. You can assign another drive if there is more than one inside the computer.

To capture video footage, follow these steps.

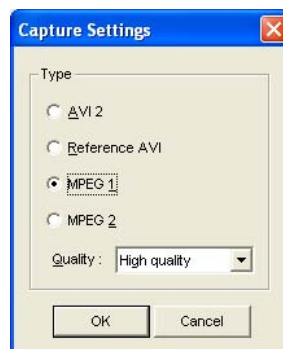
1. Open Let's EDIT 2 and manually put your camera into camera mode.
2. Choose **Capture file setting** from the Settings menu or click the **Capture Settings** button, to open the Capture Settings dialog. Select the file type to capture in.



Choose Capture file setting



Or click the Capture Settings button



Choose the file format to capture clips in

For the details about the file type, please refer to page 14.

By default, **Don't Separate capture clip** is unchecked, so Let's EDIT 2 reads changes of time, date and timecode of the footage on the camcorder and uses them to automatically cut the video into separate clips. Each new clip is placed in the Bin window to edit.

When you want to capture an undivided clip, check this item.

3. Click the **CAM** button to activate the Camera Control mode.



Confirm that the video image from the DV device is shown on the preview window.

4. To prepare your tape for capturing:

For DV sources, use the Deck controller to position the tape slightly before the start of where you want to capture.

Position the tape slightly before the start of where you want to capture by using the Deck controller.



For analog sources with using a media converter, use the controls on your camera or deck to pause playback slightly before the start of where you want to capture.

5. To begin capturing video:

For DV sources, click the **Capture** button. The captured files are stored in the folder specified by the Temporary Drives tab in the Default edit settings.



For analog sources, un-pause your camera or deck using its controls, then immediately click the **Capture** button. The captured files are stored in the folder specified by the Temporary Drives tab in the Default edit settings.

6. Click the Stop button when you want to stop capturing. Once the capturing stops, the clip(s) will appear on the Bin window.



Warning

It is better to have the camcorder switched off before making the connections to the FireWire port of the capture card and the FireWire cable.

See Also

- "Batch Capture" on page 61.
- "Seamless capture" on page 67.

File types to capture in

The captured video clips will be stored in your hard disk. The four file types are available to choose for Let's EDIT 2 to capture in: AVI2.0, Reference AVI, MPEG1 and MPEG2.

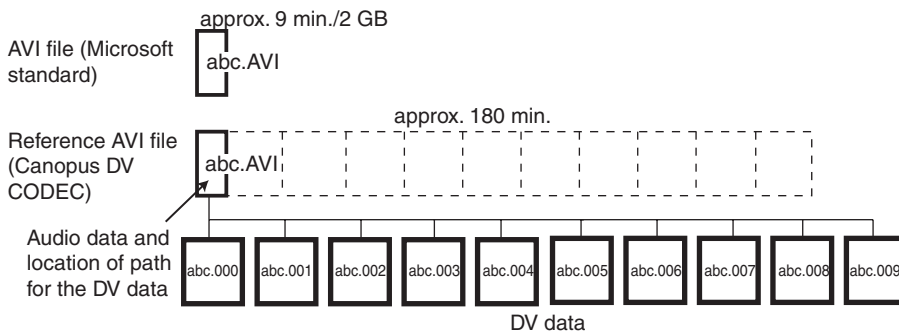
* AVI2 file

When you choose AVI2, the captured clips will be stored in Microsoft AVI2.0 format. The AVI 2.0 is a generic file format that you can edit on other editing software such as Canopus EDIUS or Adobe Premiere Pro. When you are going to edit the clip on those software, choose AVI2 to capture in.

* Reference AVI file

Reference AVI files are small AVI files that “point” to other files that contain the actual video data.

When capturing a Reference AVI file, the system makes as many 4 gigabyte data files as necessary, then creates a single AVI file that references those data files.



Reference AVI files maintain absolute paths to their data files. This means that they remember the entire drive and directory path to the data files. **Do not move the data files of a Reference AVI!** If the data files are moved, the Reference AVI will not play back properly.

When you specify multiple drives for the Temporary Drives in Default edit settings from the Settings menu, the data files for a Reference file can be stored in multiple drives, once the primary drive is full. In other words, the Reference AVI file consists of multiple files, which can be stored in multiple drives. Choose Reference AVI in case the file becomes too big to save if captured in AVI2 file.

* MPEG1 file

The video bit rate for the MPEG1 file is selectable from 950000, 800000, 600000bps.

The audio will be in layer 2, with the bit rate of 192kbps and sampling rate of 48kHz.

When the clip is being captured, MPEG information files are automatically generated, which will help improve the performance of the viewing on the Timeline.

Another benefit in choosing MPEG file is that you can export the edited MPEG file without re-encoding, in case all the clips placed on the Timeline are MPEG files without any transitions or filters.

*** MPEG2 file**

MPEG2 is the format that is used for DVD-Video disks. If you are going to create a DVD-Video disk out of the edited video clips, choose MPEG2 when you capture a video in.

The video bit rate are selectable from 8000000, 5000000, 3000000bps.

The audio is in layer 2, with the bit rate of 192kbps and sampling rate of 48kHz.

Speed Index and MPEG Information files

When you capture a video clip in MPEG format with Let's EDIT 2, MPEG Information files are automatically generated, which are like the index of the GOP information.

In general, as MPEG files use their I frames as the key frames to compress data, it takes a long time before accessing certain scenes.

Canopus improves this inconvenience with MPEG Information file technology.

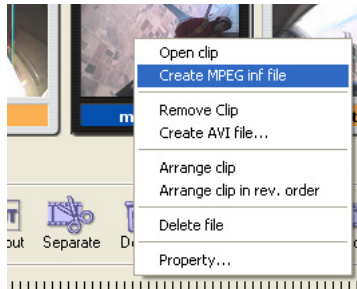
Utilizing the MPEG Information files, you can edit MPEG files smoothly and efficiently.

MPEG Information File Creator

By generating and utilizing MPEG Information Files, you can preview/search/edit your MPEG files smoothly on Let's EDIT 2 (Speed Index feature). Especially, the performance of the MPEG files in VBR (variable bit rate) mode will be highly improved.

To create MPEG Information Files from a MPEG file:

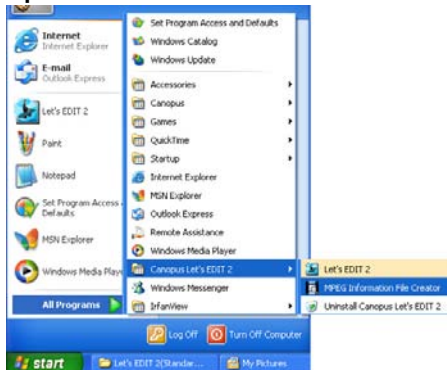
1. Right-click on a MPEG file to create Information Files in the Bin window.
2. Choose **Create MPEG Inf File**.



The MPEG Information Files (*.imv, *.ima) will be created and saved in the same folder as the source MPEG file.

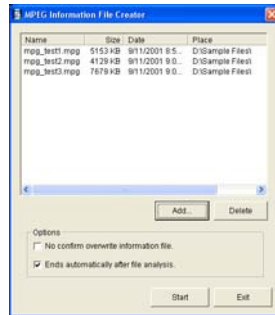
To create MPEG Information Files using MPEG Information File Creator:

1. From the Start menu, choose **All Programs (Program for Windows 2000) > Canopus Let's EDIT 2 > MPEG Information File Creator**.



MPEG Information File Creator dialog opens.

- Click the Add button to choose the MPEG file(s) to create Information files for.



- Click the Start button to create Information files for the MPEG files you have selected.

The VA symbol on the MPEG clip on the timeline, indicates that the MPEG Information files have been created for the clip.



Info

When you capture video clips with Let's EDIT 2, if you choose MPEG in the Capture Setting, the MPEG information file will automatically be generated.

Chapter 2 : QuickStart

Step 1 Capturing



Step 2 Editing and Trimming



Step 3 Titles



Step 4 Transitions and Effects



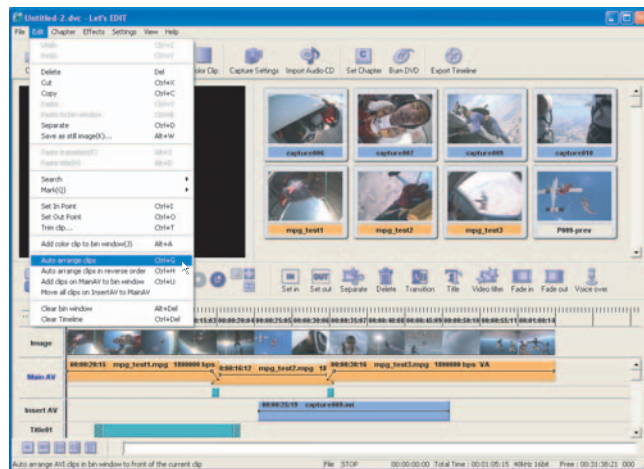
Step 5 Outputting Video Projects

Step 2 Editing and Trimming

Now that you have acquired your footage, you can begin editing your clips. You should also start thinking about any graphics or special effects you want to add to your project.

Clips residing in the Bin can be individually added to a video project at any time by clicking and dragging them down to either the **Main AV** or **Insert AV** timeline. Clips dragged to the **Main AV** timeline will automatically snap to the end of timeline unless specifically placed in between two clips already there.

To place all clips within the Bin onto the timeline, click on **Edit > Auto Arrange Clips**. Let's EDIT 2 immediately assembles all clips within the Bin onto the Main AV timeline. Clips appear in the timeline based on the order they appear in the Bin (left to right, top to bottom). To change the ordering of clips in the Bin, simply click and drag clips into the desired positions.



Clips already on the timeline can be repositioned by clicking and dragging them into desired positions.

IN/OUT POINT

Removing unwanted sections of footage is easy to do in Let's EDIT 2. Simply move the mouse toward either the beginning or end of a clip (i.e. In or Out point), until the mouse pointer changes from the default arrow to a double-sided arrow labeled either **In** or **Out**. Then click and drag the clip to the left or right depending on whether you want to lengthen or shorten the clip. Footage trimmed in this fashion is not deleted permanently and therefore can be restored by dragging back out the section removed or using the **Undo** button.

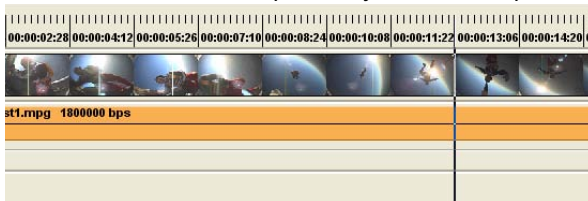


SEPARATING A CLIP

If you want to drop the scene somewhere in between a clip, you should separate the clip before removing the unneeded scene by setting the IN/OUT point. By separating a clip, you can also arrange the order of the scenes of a clip.

Follow the steps below to split a clip.

1. Move the timeline cursor to the position you wish to separate the clip.



Shown on the preview window will be the first image of the latter clip.

2. Click the **Separate** button to split the clip.

The clip will be split at the timeline cursor.



Info

Even if you separate a clip on the timeline, the result does not affect the original file or the clip in the Bin window. This editing results only be effective on the timeline, and can be previewed. If you add the separated clips onto the Bin window, or save them as new files, you can use them as new clips. To add the clip from the timeline, right-click on it and choose **Add to bin window**.

Separating a clip to remove unnecessary scene

Follow the procedures below to remove the unnecessary scene somewhere in between a clip.

1. Move the timeline cursor to the first frame of the unnecessary scene.
2. Click the **Separate** button to split the clip.



The clip will be separated in two at the timeline cursor

3. Set the In point for the latter clip.

The unnecessary scene will be removed, and the clip will automatically be moved to the end of the previous clip.

See Also

- “Add clips to the timeline” on page 48.
 - “Working with Clips in the DV Bin” on page 77.
 - “Working with Video Clips on the Timeline” on page 78.
 - “Working with Audio Clips on the Timeline” on page 84.
-

Step 3 Adding titles

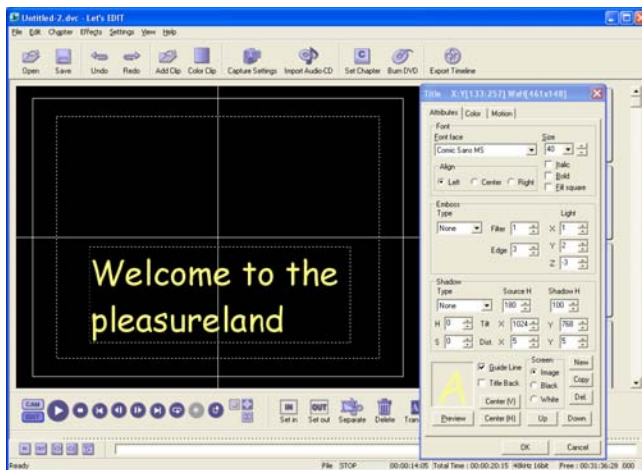
You can add titles that will appear over video on the Title tracks. Titles can include text or even graphic images or logos.

Follow the steps below to create a simple title.

1. Add a title by clicking the **Title** button on the Edit toolbar.



2. The interface will switch to Title mode.



Titling interface

3. Type some text. It will appear on the screen.

Step 1 Capturing



Step 2 Editing and Trimming



Step 3 Titles



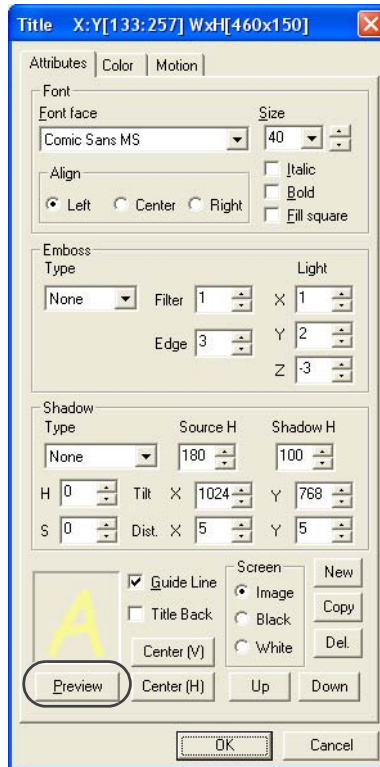
Step 4 Transitions and Effects



Step 5 Outputting Video Projects

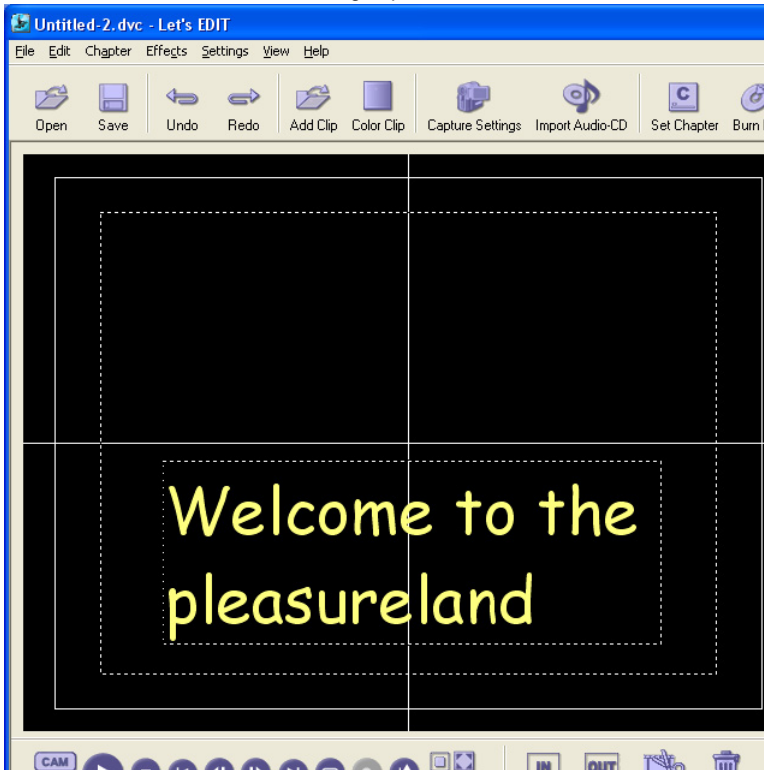
Chapter 2 : QuickStart

4. Press the **Preview** button to see what the title will look like over video.



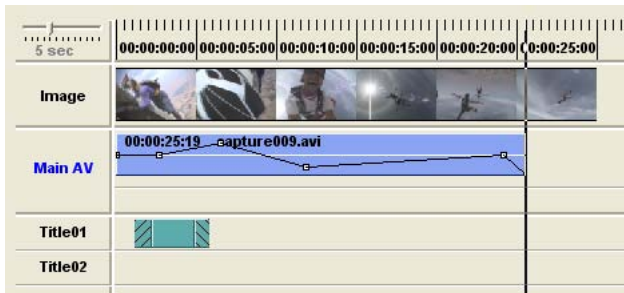
- To position the title on the screen, click off of the title to stop entering text, then click and drag it to the desired position.

Click and drag to position the title.



You can set many aspects of the title such as shadow, edge, color and motion in the Attributes, Color and Motion tabs.

- Click **OK** to accept the title and close the titling interface. The title appears on the first Title track.



Adding a title

Chapter 2 : QuickStart



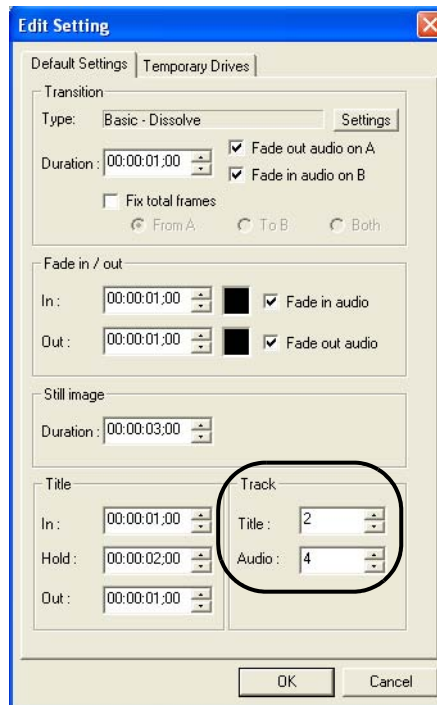
Info

Within a single title, you can have multiple layers of text (each with different text attributes) and graphics.

7. Like basic transitions, titles can also be played back in realtime. You can now play the timeline and see the title in the video.

The title we created was just a simple title that dissolves in and out. The **Motion** tab of the Title dialog has options you can change to have titles slide, wipe and do various other things. With the multiple tracks of titling and the ability to incorporate alpha-keyed graphics with titles, you can achieve many complex effects.

You can change the number of title tracks in Let's EDIT 2. (Maximum number of tracks is 10.)



See Also

- “Adding Titles” on page 98.

Step 4 Transitions and Effects

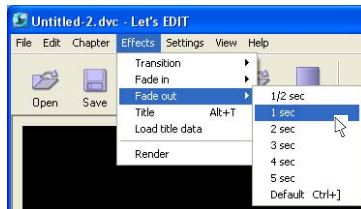
Once the ordering and placement of clips is complete, you can add effects to your project ranging from simple transitions to more complex filtering effects, such as **Chrominance**.



Fade In/Fade Out

To make your project fade in from black, first press the **Page Up** key to ensure that the effect will be applied at the start of the project and then select **Effects > Fade in** and select the desired length for the fade in.

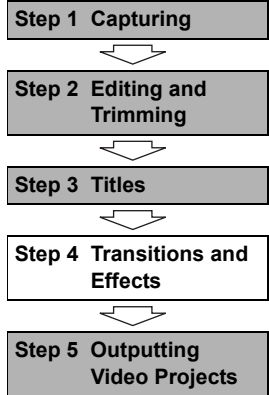
To fade out to black, place timeline cursor at the end of your project, then select **Effect > Fade out** and select the desired length for the fade out.



Adding transitions between clips

Transitions help smooth the “seams” between different video clips. They range from subtle effects such as dissolves to more apparent effects like pushes and slides.

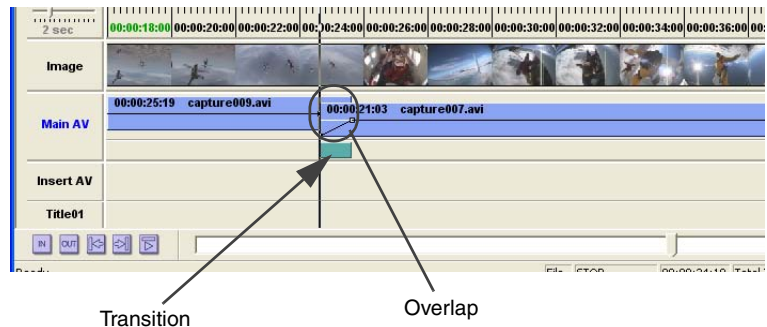
1. Let's add a transition between the two clips in the timeline. Move the timeline cursor to the point where the two clips meet by clicking and dragging the mouse in the time area.
2. Click the **Transition** button on the Edit toolbar. This will add the default transition (1-second dissolve) between the two clips.



Info

Let's EDIT includes multiple realtime transitions, each with many options and key-framing capabilities. See the “Using Let's EDIT 2” chapter for more details.

The two clips on the timeline will overlap each other, and a block will appear under the overlap.



3. Since this is a basic Let's EDIT 2 transition, we can play it back in realtime.
place the timeline cursor at the beginning of the transition. Hit the **Space bar** on the keyboard or click the **Play** button on the AV controller to play the timeline.



Hit the Space bar, or press the Play button



Info

You can disable the automatic audio fade in/out for transitions in the Default Edit Settings.

You can see that the transition between the clips plays. Also notice that the audio from the first clip fades out while the audio from the second clip fades in. Let's EDIT 2 did this automatically when it added the transition between the clips.

Rendering transitions

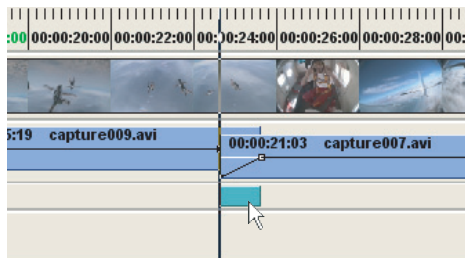
Since realtime editing expands with the speed of your system, there are no set limits to the number of realtime effects that can be present at any particular point of the timeline. For example, you could have two video clips with one video filter each, plus a transition between them.

Depending on the speed of your system, you may not be able to play all the effects back in realtime. Playback will either stop (if set to Stop Playback at Frame Drop) or start stuttering. In such cases, you should render the transition.

The transition rendering process will take the overlapping portions of the two video clips, apply any filters applied to them, process the transition between them and save the result onto your temporary drive(s). During playback, when the timeline cursor hits a rendered portion, the saved data from the temporary drive(s) will play, so the system does not need to process the transition on-the-fly.

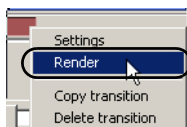
If you find you need to render a transition, follow the steps below.

1. Right-click the transition on the timeline.



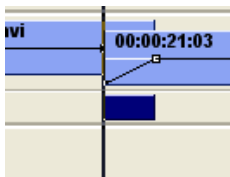
Right-click the transition

2. Choose **Render** from the pop-up menu.



Select Render from the pop-up menu

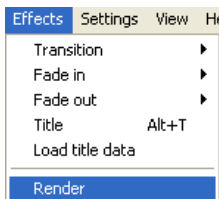
3. The timeline cursor will advance through the transition while it renders it. When the rendering is complete, the transition will appear dark blue.



Rendered transition

The transition will remain rendered unless you make changes to the transition settings or the video clips, such as lengthening the transition, adding/removing filters, or trimming the clip in the overlap area.

You can also render all transitions on the timeline by selecting **Effects > Render**.



See Also

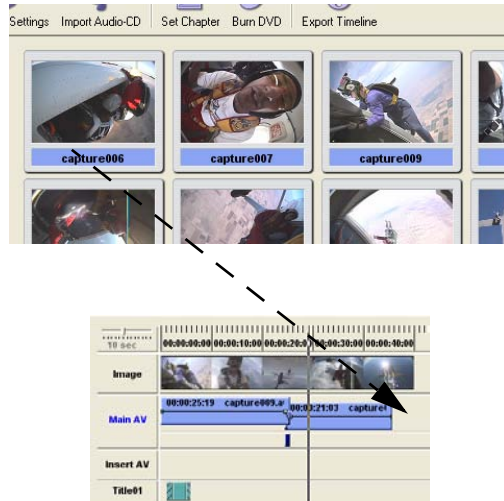
- “Adding Transitions” on page 94.
- Chapter 4 “Transition Settings” on page 181.

Chapter 2 : QuickStart

Adding video filters

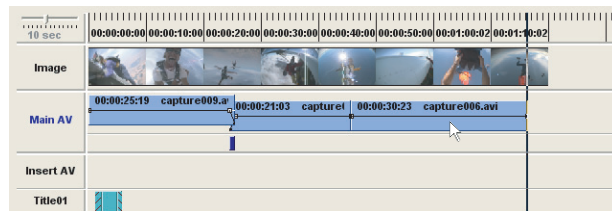
The most useful feature of your Let's EDIT 2 editing package is the wide selection of realtime video and audio filters. Unlike transitions which work between two clips, filters affect a single clip.

1. Drag an AV clip from the DV Bin to the end of the Main AV track.

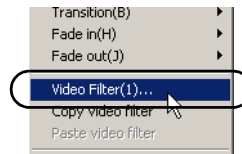


2. Right-click on the clip you just added to the timeline and choose **Video Filter**.

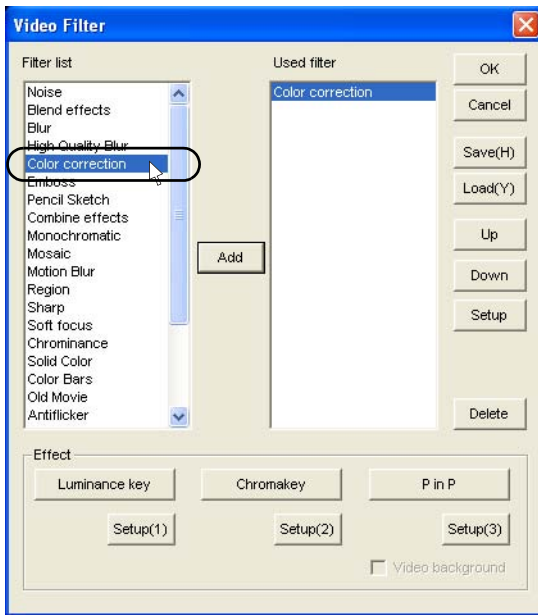
Right-click the clip you added



Choose Video Filter from the pop-up menu

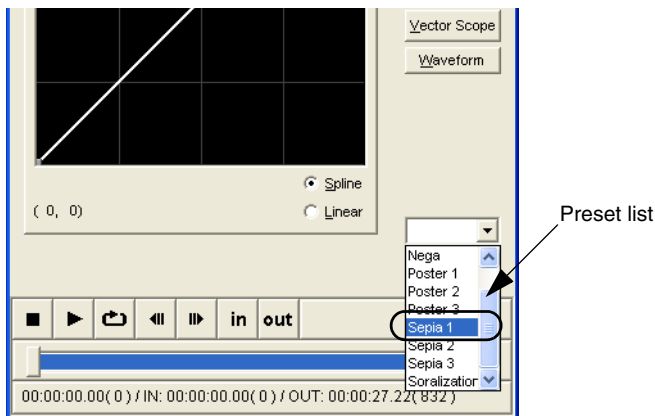


- The list of video filters will appear. Select **Color correction** from the list.



Let's EDIT 2 video filter list

- Select **Sepia 1** from the drop-down preset box. This will apply a sepia tone to the video. You can see the effect of the filter previewed on the preview area as well as through the DV and analog outputs.



Select Sepia 1 from the preset list

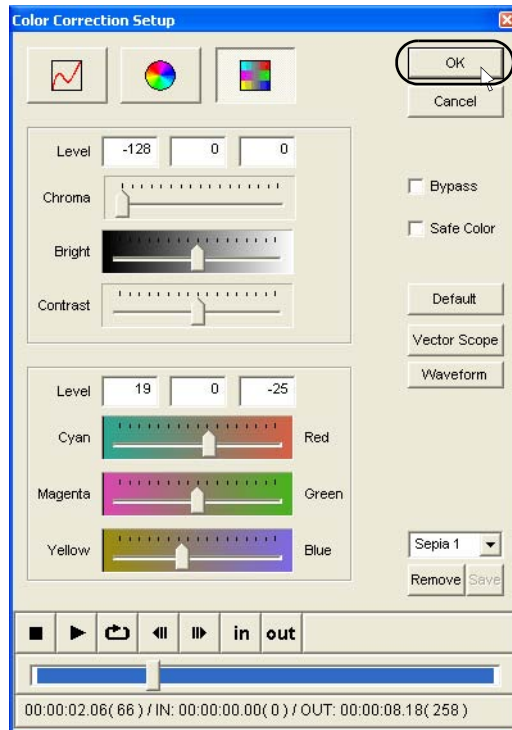
Chapter 2 : QuickStart



Info

Most complex filters have presets and they are usually the easiest way to set up the filter. However, you are free to change any or all of the settings individually. You can also save your own presets. See the Video Filters reference chapter for more details.

5. Click **OK** to accept the color correction settings.



Click OK to accept the preset settings



Info

Note the grayed-out buttons for Luminance key and Chromakey. These are used for superimposing portions of video over other video. Luminance key can make certain brightness values transparent. Chromakey can make certain color values transparent. See the Video Filters reference chapter for more details.

6. Click **OK** to accept the video filter selection.
7. Notice how the clip now has diagonal hash-marks through it. The lower-left to upper-right lines indicate that a video filter is applied to the clip.



Clip with video filter applied

8. Press the **Space bar** to play the timeline — the clip now plays with a sepia color tone.

Depending on the speed of your system and the filters you choose, you can combine several filters together and play them back in realtime for very complex effects.

For example, you can combine Pencil sketch with Color correction for an 'x-ray' look.

See Also

- “Adding video filters” on page 109.
- Chapter 5 “Video Filter Settings” on page 205.

Rendering filters

Since realtime editing expands with the speed of your system, there are no set limits to the number of realtime filters that you can put on a particular clip. For example, you could have a video clip with three filters – Old movie, Pan pot & balance and Graphic equalizer.

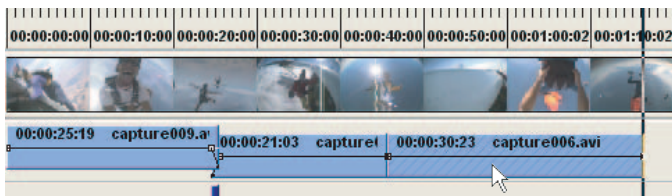
Depending on the speed of your system, you may not be able to play the filtered clip back in realtime. Playback will either stop (if set to Stop Playback at Frame Drop) or start stuttering. In such cases, you should render the clip with its filters.

The filter rendering process involves taking the source video clip, processing the applied filters, saving a new clip and replacing the old clip in the timeline with the new clip.

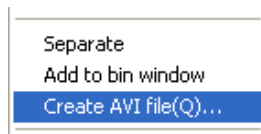
If you find you need to render the filters on a clip, follow the steps below.

1. Make sure the filter settings are as you want them on the clip. After you render the clip and it is replaced in the timeline, you won't be able to expand the clip or change its filter settings.
2. Right-click on the filtered clip you want to render.

Right-click the video clip

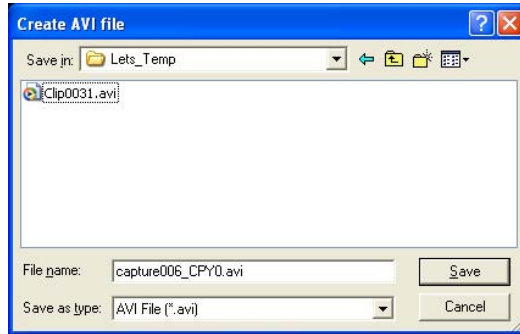


3. Choose **Create AVI file** from the pop-up menu.



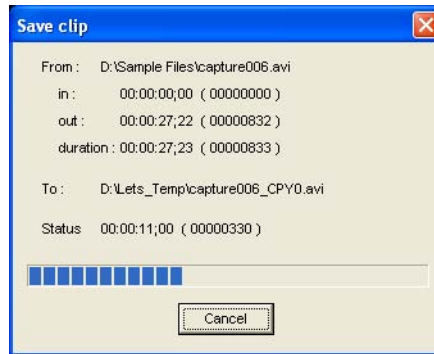
Chapter 2 : QuickStart

4. A file window will appear and ask you for a location and filename to save the new clip. You can accept the default name, or rename the clip to something more appropriate. Make sure you save the new AVI on your video drive.



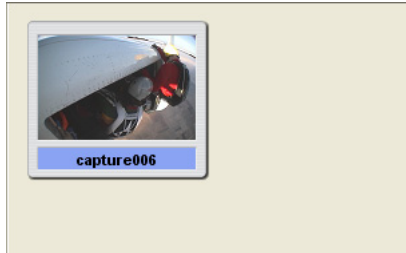
Choose a location and filename for the new AVI

5. Let's EDIT 2 will process the filtered clip and save the result with the name you specified.

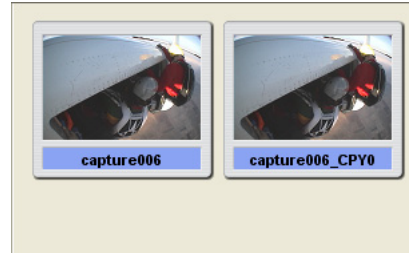


Clip rendering progress dialog

- The new clip is added to the DV Bin, and the clip you rendered on the timeline will be replaced by the new clip.



Bin before filter rendering



Bin after filter rendering



Timeline before filter rendering



Timeline after filter rendering

Unlike rendered transitions, rendered video clips are like captured clips. They can be trimmed and further modified without the filtering being affected since the filter is already part of the video data.

NOTE: You cannot render filters on audio clips.

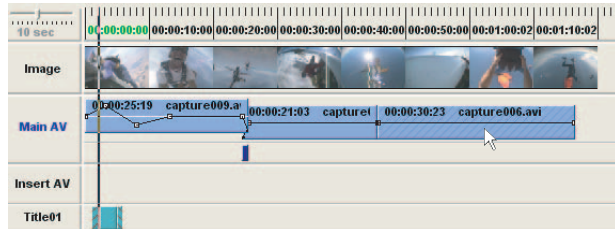
Adding audio filters

You can add audio filters to audio and video clips in a similar way to video filters.

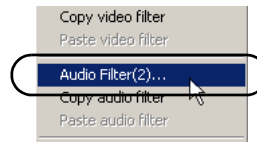
Follow the steps below to add an audio filter to a clip.

1. Right-click on the clip you added the video filter to and choose **Audio filter**.

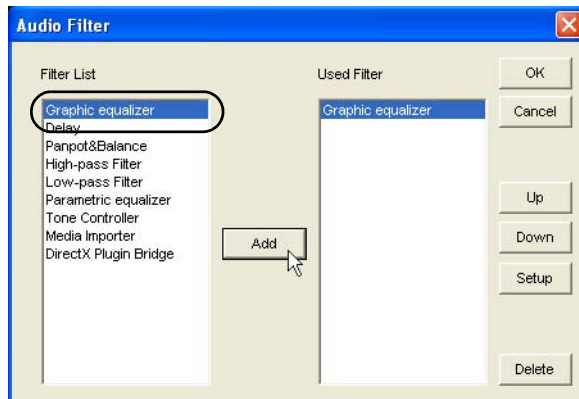
Right-click the clip you added



Choose Audio Filter from the pop-up menu

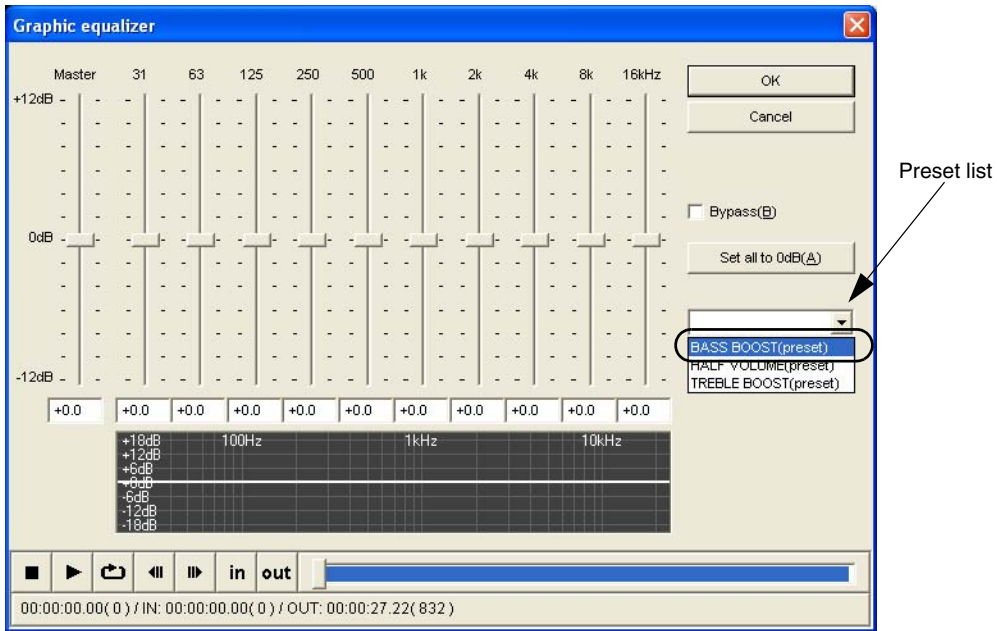


2. The list of audio filters will appear. Select **Graphic equalizer** from the list.



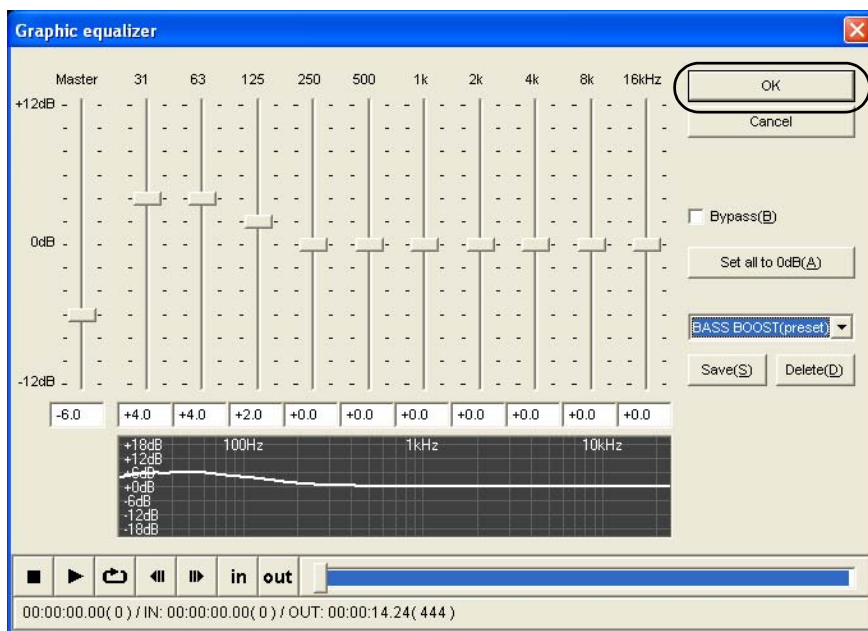
Let's EDIT 2 audio filter list

3. Select **Bass Boost** from the drop-down preset box. This will apply a bass boost to the clip.



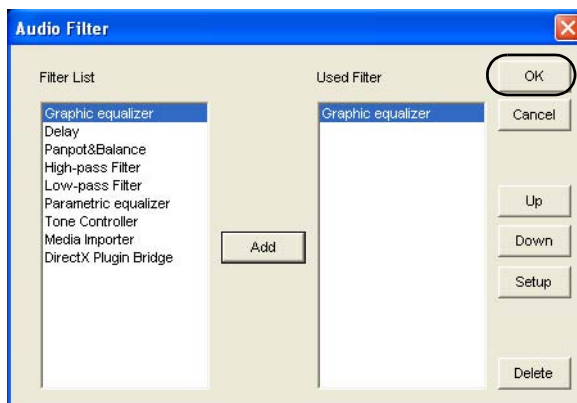
Select Bass Boost from the preset list

- Click **OK** to accept the bass boost settings.



Click OK to accept the preset settings

- Click **OK** in the Audio Filter dialog to accept the audio filter selection.



6. Notice how the clip now has diagonal hash-marks through it. The upper-left to lower-right lines indicate that an audio filter is applied to the clip.



Clip with audio filter applied

Since we added an audio filter to a clip that already had a video filter applied, it really looks like this:



Clip with audio and video filters applied

7. Press **Space bar** to play the timeline – the clip now plays with a bass boost.

Depending on the speed of your system and the filters you choose, you can combine several filters together and play them back in realtime for very complex effects.

For example, you can combine Delay with a High-pass filter.

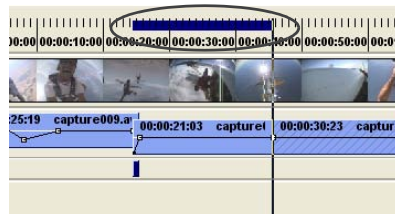
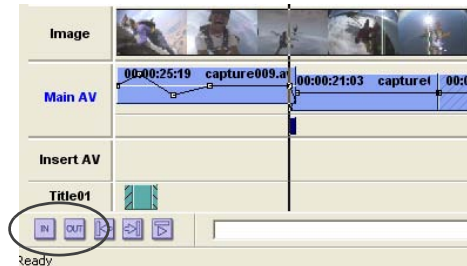
See Also

- “Adding audio filters” on page 113.
 - Chapter 6 “Audio Filter Settings” on page 281.
-

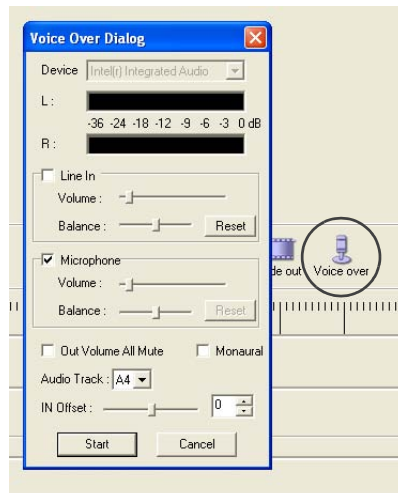
Voice over

Narration can be added to the Extra Audio timeline. You will need to connect a sound input device such as a microphone to the line in or microphone jack of your personal computer.

1. Specify the narration range by sliding the timeline cursor to select **Set Mark IN** and **Set Mark OUT** points. After setting the narration range, a blue line will appear under the time scale to indicate the selected area.



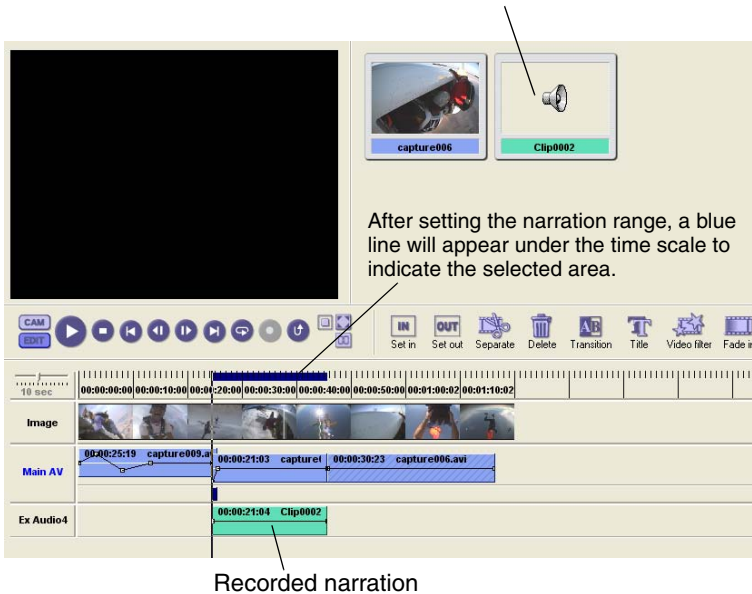
2. Click the **Voice over** button in the Edit Toolbar or select **Voice over** from the File menu. The Voice Over Dialog will appear.



3. Check that the sound input device is connected to your computer, and select **Line In** or **Microphone**, depending on which jack the device is plugged into. Adjust the input volume in this setting window if required.
4. Click the **Start** button. The timeline cursor rolls back 3 seconds before the **Set Mark IN** point specified in step 1, then recording starts.

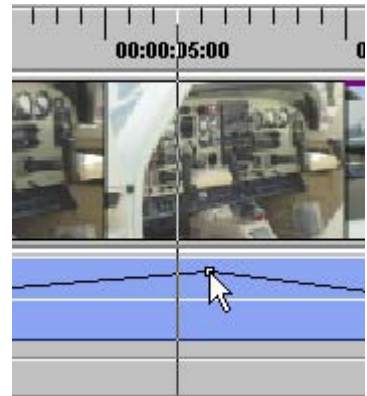
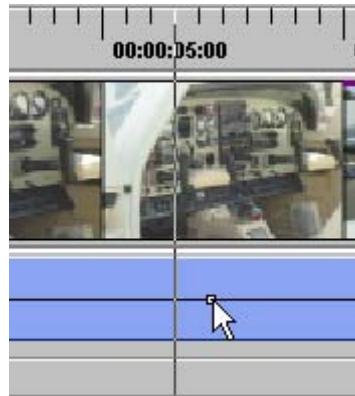
When the timeline cursor reaches the end of the selected narration range, the timeline cursor will stop three seconds after the specified **Set Mark OUT** point. The recorded narration will be displayed on one of the Audio tracks, and will be stored as a new audio clip in the DV Bin.

The recorded narration will be displayed on one of the Audio tracks, and will be stored as a new audio clip in the DV Bin.

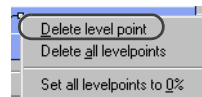


Adjusting Audio levels

The line in the middle of the clip represents its volume level. To adjust the audio levels of a clip, click on the line to add a node, then drag the node up or down to adjust the level.

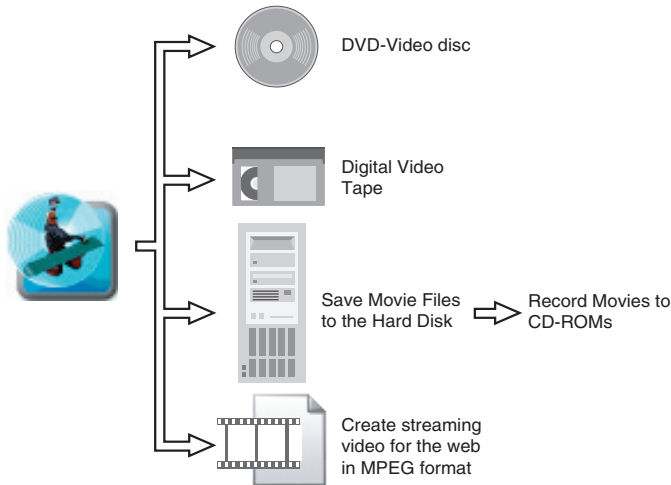


To delete an audio node, right-click on it and choose **Delete level point**.



Step 5 Outputting Video Projects

Once a video project has been completed, it can be exported (output) to a number of different formats such as DVD, DV, VHS, MPEG and other streaming media formats.



Step 1 Capturing

Step 2 Editing and Trimming

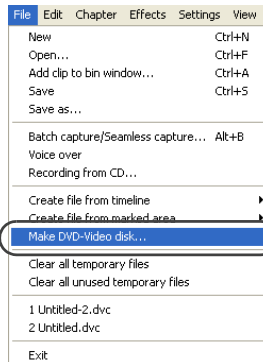
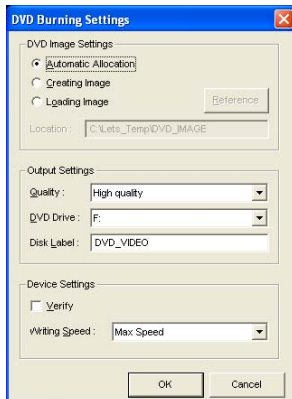
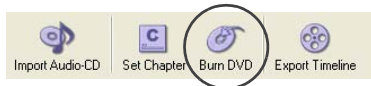
Step 3 Titles

Step 4 Transitions and Effects

Step 5 Outputting Video Projects

Make DVD-Video disk

Click the **Burn DVD** button or select **Make DVD-Video disk** from the **File** menu to open the DVD Burning Setting dialog.



Click the OK button to start burning a DVD.

DV-Sync record

The following steps will output your timeline to a DV camera or deck.

1. Verify that the timeline can be played back in realtime. If portions of the timeline cannot be played back in realtime, select **Render** from the **Effects** menu to render transitions.

If you still cannot play the timeline back, render clips with filters (see the previous section).

2. Insert a blank tape into your DV device. Make sure it is not write-protected.
3. Click the **Sync Record** button on the Deck controller.

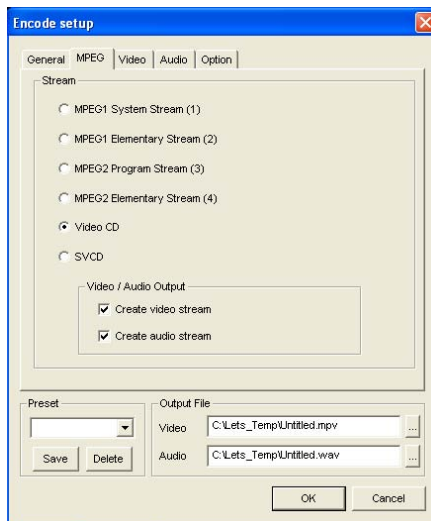


Let's EDIT 2 will record the timeline to the tape starting at the current tape position.

Export to MPEG format

- > **MPEG (VideoCD):** MPEG compression is used to let large-sized video projects fit onto optical media such as CDs and DVDs. Let's EDIT 2 features a built-in MPEG exporter that will compress your video project into a file (or files) compatible with the VCD.

To export a project to an MPEG file, click on **File > Create from timeline > Create MPEG from timeline**. The MPEG export window appears with a number of different MPEG stream types available. The **VideoCD** and **SVCD** presets are designed to automatically preset encoding options to create a compatible file for VideoCD creation software.



Once encoding options are set, enter a filename and path to save the MPEG file(s) and then click **OK**. Encoding speeds vary depending on the speed of your computer and are most efficient when the machine is dedicated solely to performing this task. Generally, you could wait until the computer is not needed, such as overnight, before encoding your project into MPEG video. Once the encoding is complete, the file or files may then be imported into VCD authoring software for making menus or simply burning to a recordable disc.

See Also

- "Outputting your Production to Tape" on page 124.
- "Exporting the timeline or a segment of the timeline" on page 127.

Let's EDIT 2 have many more features than were discussed in this simple tutorial. Please take some time to go through the following chapters to learn about all their features.

Chapter 2 : QuickStart

Let's EDIT 2

Chapter 3

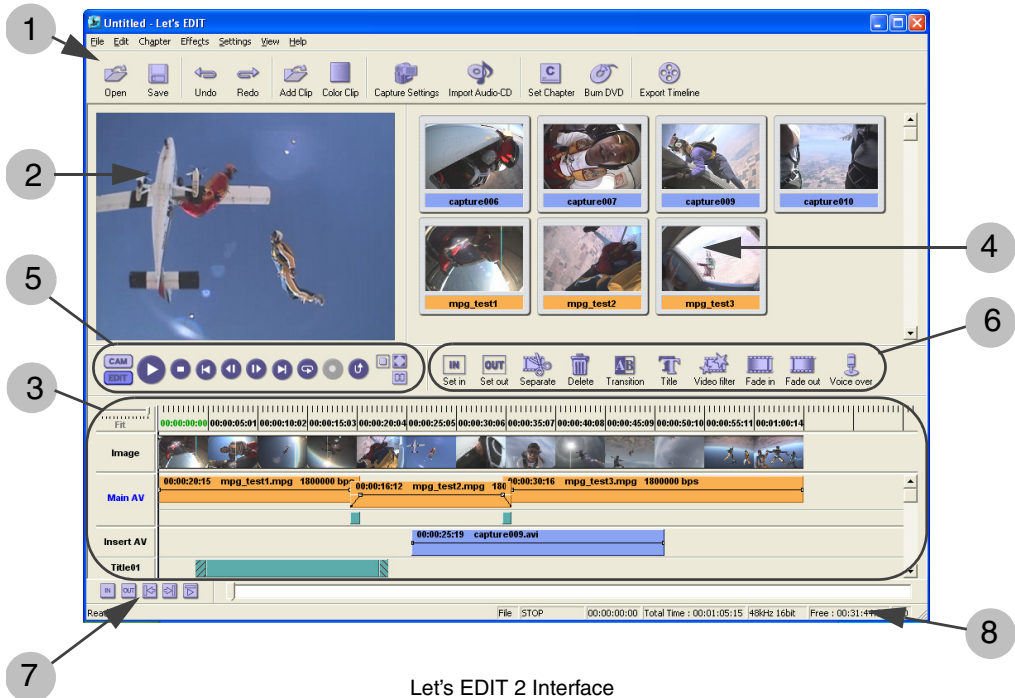
Using Let's EDIT 2

This chapter introduces you to Let's EDIT 2.

The features of Let's EDIT 2 will be described to familiarize you with its functions.

Let's EDIT 2 Interface

The Let's EDIT 2 application allows you to edit and output your captured video. It provides playback of video on the computer screen, titling, transitions, camera/deck control, and output capabilities.



Let's EDIT 2 Interface

The Let's EDIT 2 window consists of eight main sections:

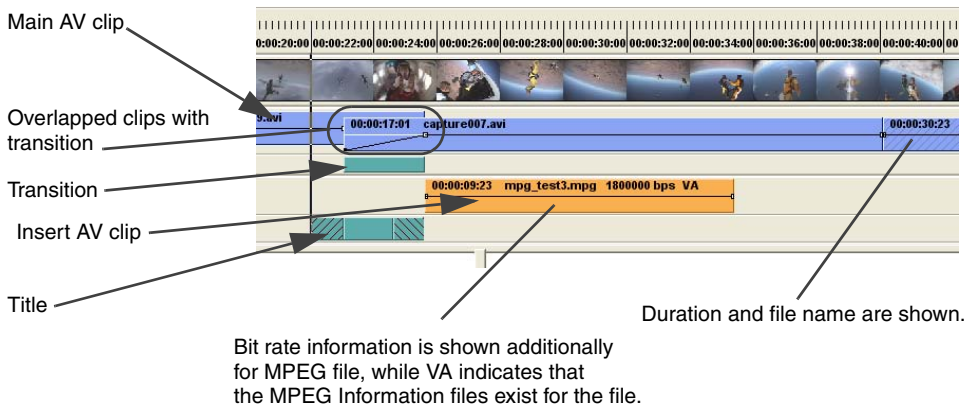
1. **Main Toolbar** — Includes shortcut buttons for commonly used menu items.
2. **Preview window** — Provides a visual preview of video projects currently being worked on. Effects, filters, transitions and titles will appear instantly when applied to your video projects. In addition, realtime preview enables you to get instant feedback when customizing any particular effect.
3. **Timeline** — This section is a linear representation of a video project with several tracks for different media types (audio, video, titles). Clips appear as colored blocks on the different tracks and can be trimmed, repositioned, copied and deleted. Changing the default editing settings allows for more title and audio tracks to be added (up to 10 of each).

4. **Bin** — This large section is where all the various media clips such as audio, video and pictures can be stored for usage in a video project. The Bin also has a secondary function as a storyboard, in which the ordering of clips can assist with the quick creation of a project.
5. **Control Toolbar** — Contains the buttons to control the connected DV device. Switching the **CAM** and **EDIT** buttons, you can control not only the connected DV device but also the video project you are editing.
6. **Edit Toolbar** — Buttons to use when you edit your video project, such as trimming, adding transition, editing title data and recording voiceover, etc.
7. **Marker Control Toolbar** — Buttons to utilize Mark IN/OUT functions, such as setting, jumping and playing vack.
8. **Status bar** — Displays the information on the DV device, timeline, button functions the mouse cursor is over, and the free space for the disk you have set temporary folder through the Default Edit Setting.

The Timeline

The Let's EDIT 2 timeline has Main AV, Insert AV, Title tracks and Audio tracks.

You can change the number of title tracks shown in the Default Edit settings from Settings menu.



The Film track displays thumbnail views of the video on the Main AV and Insert AV tracks. This track can be turned off if you want.

The Main AV track is the main video track. You can drag video clips to this track and they will appear one-after-another. You can add effects or transitions between clips on this track.

Chapter 3 : Using Let's EDIT 2

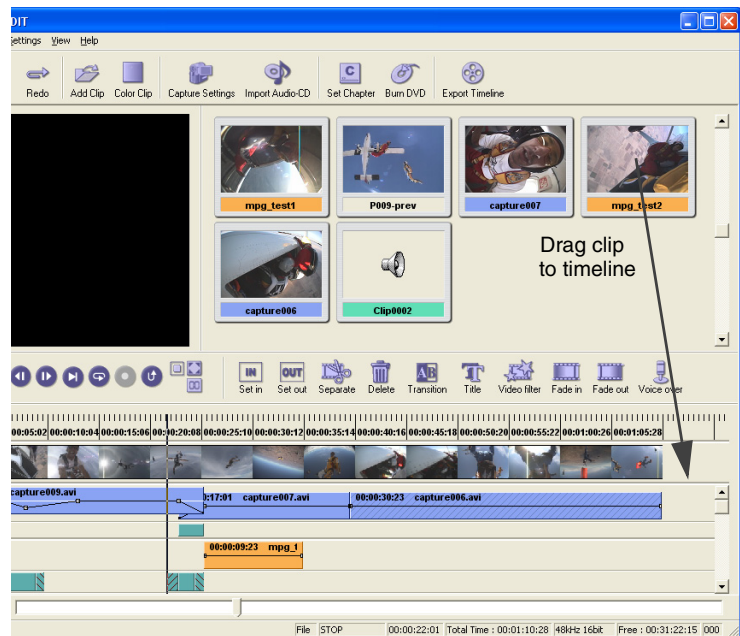
The Insert AV track is used for placing segments of video over the Main AV video. Video clips placed here will play over the corresponding video on the Main AV track. The Insert AV track is also used for chroma and luma keying and P in P.

The Title tracks are used for placing titles and graphics over video.

The Ex Audio tracks are used to add extra audio such as music to your production.

Add clips to the timeline

To add a clip from the DV Bin to the timeline, click on it and drag it to the timeline. It will be added or inserted where you drop it.



Video clips (AVI, MPEG Files) and still images (see the next page for supported file types) can be placed on the Main AV and Insert AV tracks.

There is no limitation on the resolution of the clip. The clip will automatically be converted to D1 (720 x 480 pixel) size.

Audio clips (WAV files) and video clips (AVI, MPEG files) can be placed on the EX Audio tracks. If you place a video clip on an EX Audio track, it is used as an audio clip, utilizing only its audio element.

Supported Image file types:

Windows BITMAP (bmp, dib, rle), JPEG (jpg, jpeg), JFIF (jfif), PICT (pic, pct, pict), PNG (png), Mac Paint (pntg, pnt, mac), Photoshop (psd), Quick Time Image (qti, qtif), Silicon Graphics Image File (sgi, rgb), True Vision Targa (tga, targa, vda, icb, vst), TIFF (tif, tiff), Flash Pix Files (fpx), Compuserve GIF Files (gif)

> The Flash Pix Files (fpx) and the Compuserve GIF Files (gif) can be loaded to your Let's EDIT 2. However, those file types cannot be used to save as still image.

To add all the video clips from the DV Bin to the timeline, choose **Auto arrange clips** from the Edit menu. The clips will be added before the clip the timeline cursor is on. To put clips after the clip the timeline cursor is on, choose **Auto arrange clips in reverse order**, from the Edit menu.

Edit	Chapter	Effects	Settings	View	Help
Undo					Ctrl+Z
Redo					Ctrl+Y
Delete					Del
Cut					Ctrl+X
Copy					Ctrl+C
Paste					Ctrl+V
Paste to bin window					Ctrl+B
Separate					Ctrl+D
Save as still image(K)...					Alt+W
Paste transition(F)					Alt+S
Paste title(H)					Alt+D
Search					▶
Mark(Q)					▶
Set In Point					Ctrl+I
Set Out Point					Ctrl+O
Trim clip...					Ctrl+T
Add color clip to bin window(J)					Alt+A
Auto arrange clips					Ctrl+G
Auto arrange clips in reverse order					Ctrl+H
Add clips on MainAV to bin window					Ctrl+U
Move all clips on InsertAV to MainAV					
Clear bin window					Alt+Del
Clear Timeline					Ctrl+Del

Clips appear as colored blocks in the timeline. Blue blocks represent clips with 48 kHz audio, green blocks represent clips with 44.1 kHz audio, and yellow blocks represent clips with 32 kHz audio.



Tips

You can use not only AVI files but also MPEG1 or MPEG2 files as clips. Put the file in the Bin window for use in the Timeline.

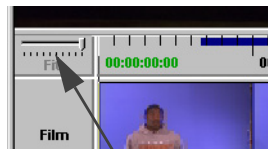
You can also add AVI or MPEG file to the EX Audio track of the Timeline. By adding a video clip on the Ex Audio track, its embedded audio data is used as additional audio to the Main AV track. There is no specific restriction in the resolution of the MPEG file to use. The MPEG file is automatically converted to D1 size (720 x 480 pixel), When registered for use in Let's EDIT 2.

Controlling the timeline

Adjusting the time scale

Often times, you may want to view a zoomed-in or zoomed-out view of the timeline for fine adjustments or locating a specific section.

The Timescale slider controls how the timeline is displayed. Slide it to the left to go down to a 1 frame view, or slide it to the right to go to a Fit view. The timeline can be viewed in 1 frame, 10 frame, 1 second, 2 second, 5 second, 10 second, 15 second, 30 second, 1 minute, 5 minute, 10 minute, 15 minute and Fit scale.

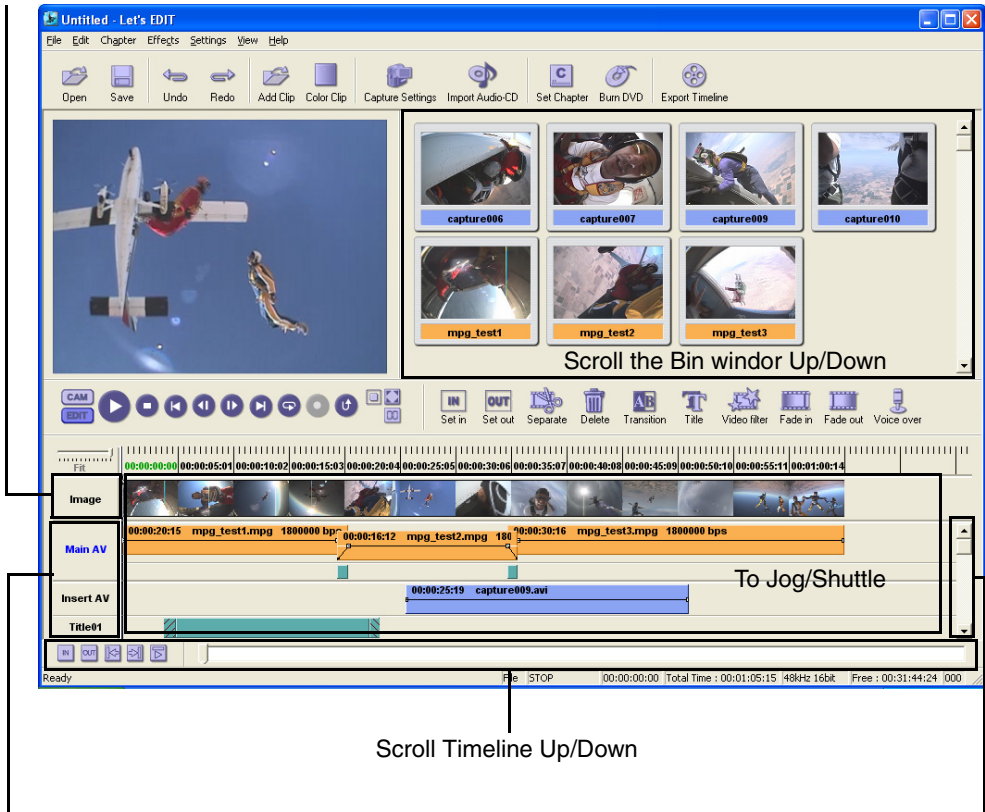


Timescale slider

Chapter 3 : Using Let's EDIT 2

Shuttle/Jog control in the Timeline with Wheel mouse

Change Timescale



Scroll Timeline Up/Down

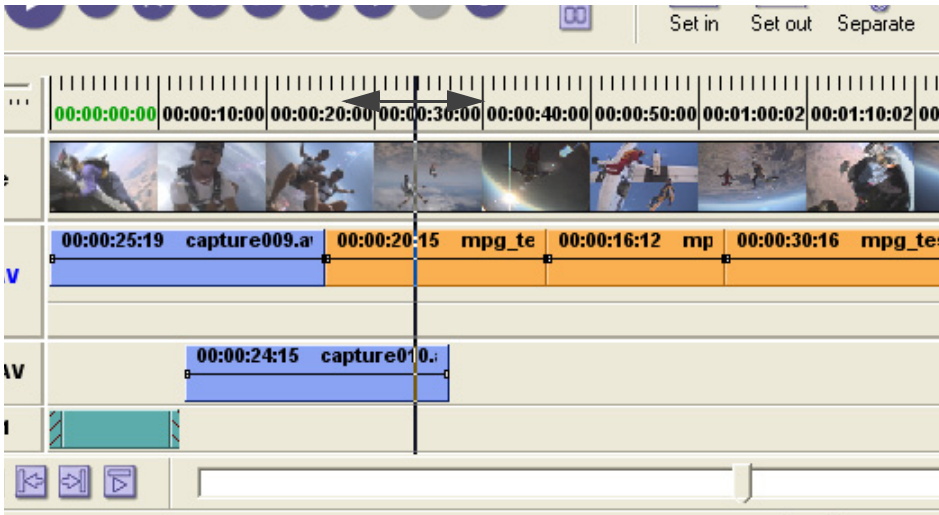
Scroll Timeline Right/Left

Click the wheel button to switch Jog mode and Shuttle mode.

Scrubbing

You can scrub through the timeline by clicking and dragging the mouse in the time display area.

Click and drag the mouse across the time display



If you have a wheel mouse, you can also use the scroll wheel to move frame-by-frame through the timeline. Roll the wheel down to step forward, and roll the wheel upward to step backward.

You can also use the **Next frame** and **Previous frame** buttons on the EDIT controller to move from frame to frame.

Looping playback

By default, when you play the timeline, it plays and stops at the end. By checking **Repeat playback** in the **Settings** menu, you can have the timeline loop back to the beginning and continue playing when it reaches the end.

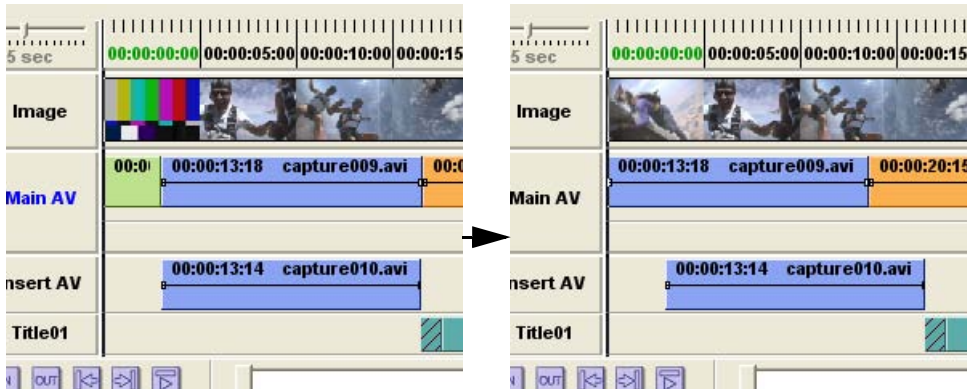
Scrubbing with audio

You can choose to hear audio when scrubbing the timeline. The audio from the Main AV, Insert AV and Ex Audio tracks will be mixed and play while scrubbing. Since audio scrub can slow response time, you can toggle whether audio plays while scrubbing by selecting **Scrub audio** from the **Settings** menu.

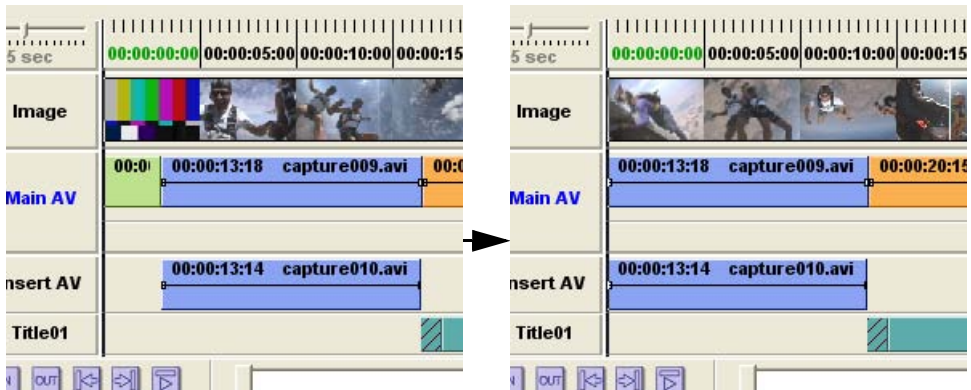
Chapter 3 : Using Let's EDIT 2

Ripple editing

The ripple editing feature keeps Insert AV, Titles, and Ex Audio clips “locked” to the corresponding Main AV frame. With Ripple Editing enabled, if a clip is added or removed from the Main AV track, the clips on the Insert AV, Title and Ex Audio tracks will move to the appropriate positions to stay with the Main AV clips.



Delete first clip with Ripple editing off

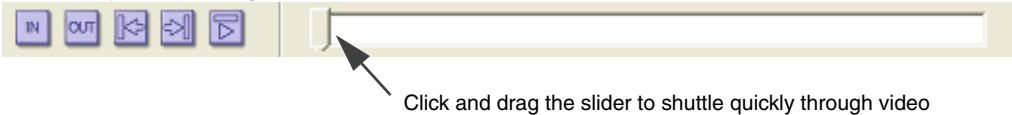


Delete first clip with Ripple editing on

When Ripple Editing is on, the Main AV track label appears in blue.

Shuttling

You can use the Shuttle bar shuttle through video. Click the slider and drag it to quickly move through the video.



To shuttle through video using a wheel mouse, click the wheel to go into Shuttle mode. Roll the wheel down to shuttle forward. Roll the wheel up to shuttle in reverse. The shuttle speeds are: 1/4 speed, 1/2 speed, 1x speed, 2x speed, 4x speed, 8x speed, 10x speed, 20x speed, and 40x speed.

Playing

You can play the timeline by hitting the Spacebar, or using the controls on the EDIT controller.



Marking Timeline In and Out points

You can mark an area of the timeline for playback and export by setting Timeline In and Out points.

To set a Timeline In or Out point, choose **Set mark in** or **Set mark out** from the Mark section of the Edit menu, or click the **Set mark in** or **Set mark out** buttons on the Marker controller.

Choose Set mark in or Set mark out from the Edit menu

Mark(Q)		Set mark in	Shift+Up
Set In Point	Ctrl+I	Set mark out	Shift+Down
Set Out Point	Ctrl+O	Jump to mark in	Ctrl+Up
Trim clip...	Ctrl+T	Jump to mark out	Ctrl+Down
Add color clip to bin window(J)	Alt+A	Play from in to out	Alt+Enter
		Clear mark in/out	

Or click the IN or OUT buttons on the Marker controller



Once you have a Timeline In and Out point set, you can play the marked area, export the marked area, and jump to the marked In point, or Out point.

Chapter 3 : Using Let's EDIT 2

The marked area of the timeline will have a blue bar above it.



Marked timeline area

Hiding and Showing tracks

You can hide any track except the Main AV track by clicking on the track label. When the label is white, the track is not be displayed on the output.

Click the track label to hide or un-hide it

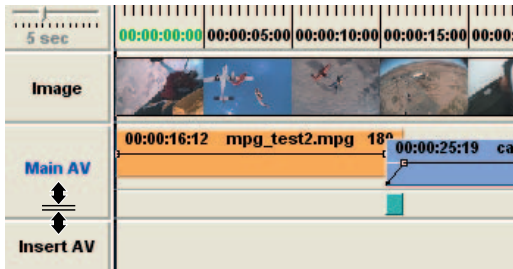


Changing display of Main AV track

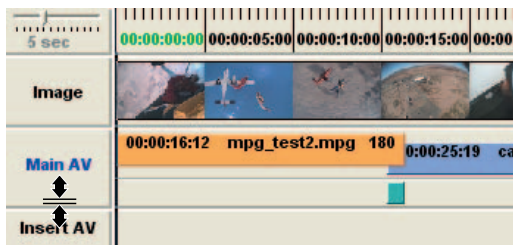
By default, Main AV track is shown as basic in height with an audio level line.

When you move the cursor over the Main AV track label, the cursor alters to the two-headed arrow shape. Then you can change the display of Main AV track by clicking the mouse.

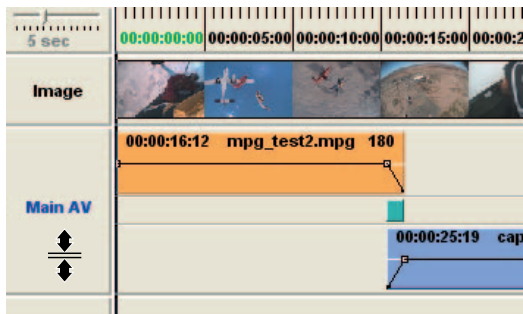
Display of Main AV track changes in the following order: Basic(single and medium height with audio level), single tall line, double low lines without audio level, double lines, double tall lines, single low line and returns to the basic shape.



Main AV track Basic (single and medium height with audio level)



Main AV track (single low line)



Main AV track (double tall lines)

When Main AV track is shown as double lines, it is easy to confirm where transition is set.

The audio level is hidden when the height of Main AV track is low. It will be helpful if you work on AV clips without making any changes to the audio level.

Setting Temporary drives

The temporary drives are where captured video files, recorded WAV files, output media files and rendered (processed) effects are stored.

C:\Lets-Temp is selected by default which is automatically created when you install Let's EDIT 2 application to your machine.

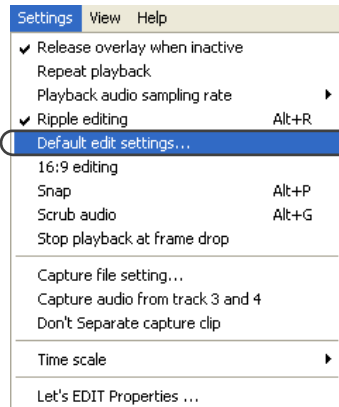


Tips

The default temporary folder is located on the C drive, however, we recommend you select a drive other than the system drive where your operating system is installed.

To set the Temporary drives, follow these steps:

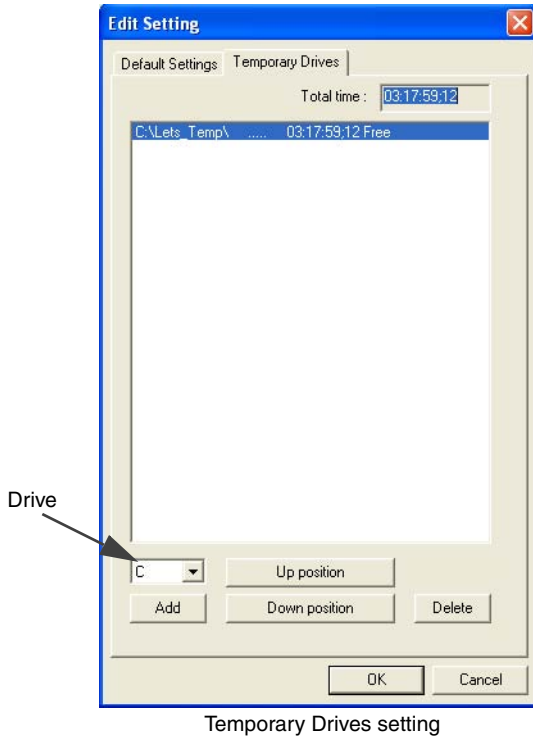
1. Choose **Settings > Default edit settings**.



Choose Default edit settings from the Settings menu

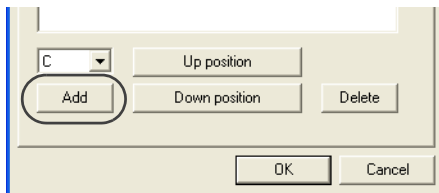
2. In the **Edit Setting** dialog that appears, select the **Temporary Drives** tab.

3. Select your video drive from the **Drive** drop-down menu.



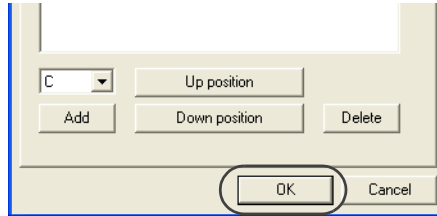
Temporary Drives setting

4. Click the **Add** button. The drive you specified will appear in the list. If you have multiple video drives, you can add them here and as each gets filled, the next one will be used. You can change the order by clicking **Up position** or **Down position** buttons.



Chapter 3 : Using Let's EDIT 2

5. Once you set the temporary drives, Let's EDIT 2 will remember the setting until you change the setting or, uninstall or reinstall the software. Click the **OK** button to close the settings dialog.

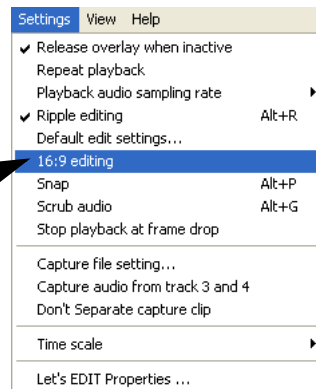


Setting the editing aspect ratio

Let's EDIT 2 can work with both 4:3 and 16:9 DV clips. However, you cannot mix 4:3 and 16:9 clips in the same project. When editing in 16:9 aspect ratio, transitions and titles will be rendered in 16:9 aspect so they display properly in widescreen.

To edit in 16:9, make sure **16:9 editing** is checked in the Setting menu. To edit in 4:3 mode, make sure that **16:9 editing** is not checked in the Setting menu.

Enable or disable
this option depending
on your project



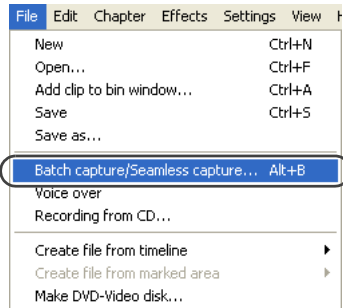
Batch Capture

Batch capture allows you to mark only the segments of video that you want and capture it all in at one time.

To set up Batch Capture:

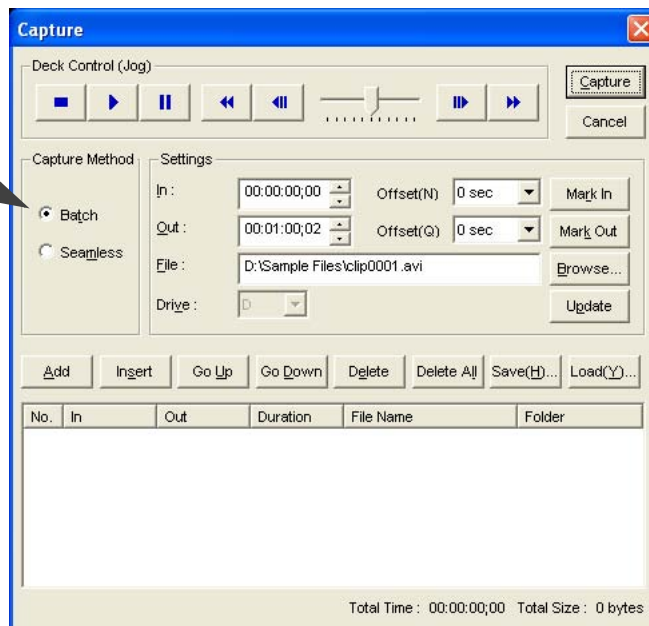
1. Choose **Batch capture/Seamless capture** from the File menu.

Choose Batch Capture/Seamless capture from the File menu



2. The Batch capture/Seamless capture window will appear. Make sure the **Capture Method** is set to **Batch** for batch capture.

Make sure this is set to Batch

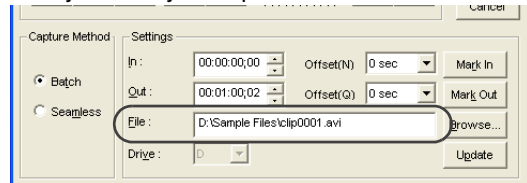


Batch capture/Seamless capture window

Chapter 3 : Using Let's EDIT 2

3. Set a filename for the clip you want to capture. If you have a dedicated video drive, make sure you save your clip on there.

Set AVI filename

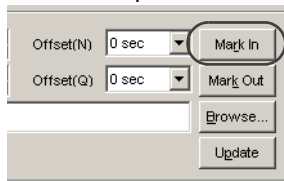


4. Use the Deck controller to position the tape at the start of where you want to capture.

Position the tape at the start of where you want to capture by using the Deck controller.



5. Click the **Mark In** button. The In point will be entered automatically.

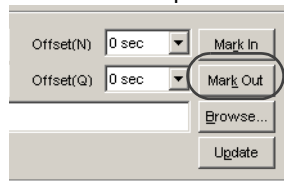


6. Advance the tape to the end of the desired segment.

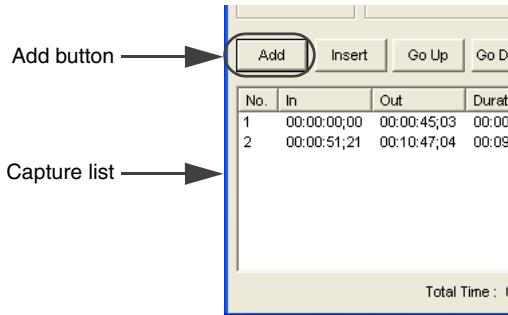
Position the tape at the end of where you want to capture by using the Deck controller.



7. Click the **Mark Out** button. The Out point will be entered automatically.



- Click the **Add** button to add the selected clip to the capture list. The clip will appear in the list on the bottom of the Batch capture/Seamless capture window.



Info

While you can arrange clips on the batch list in a different order from how they appear on the tape, this will slow capturing. Be careful not to capture beyond the recorded section of the tape, or mark points in unrecorded segments. You may have problems if you mark in points that occur within the first 10-20 seconds of the tape.

- Repeat steps 5-9 for any additional clips you want to capture. Let's EDIT 2 will automatically increment the filename for you.
- Click the **Capture** button to begin capture. Let's EDIT will capture the selected clips to your hard disk.

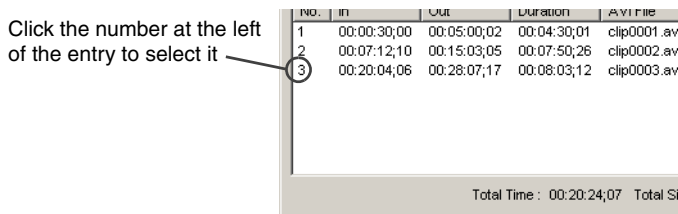


- After capture is complete, the clip(s) will appear in the Bin.

Changing, Saving, and Loading Capture lists

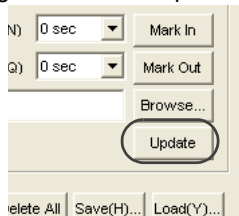
To select a capture list entry:

- Click on the number to the left of the entry.



Chapter 3 : Using Let's EDIT 2

- You can change a capture list entry's In and Out points by selecting it, changing the In and Out points, and clicking the **Update** button.



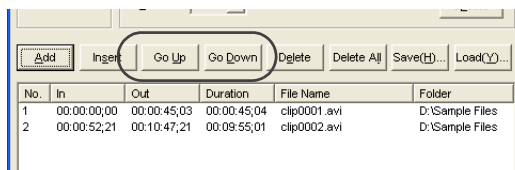
Click the Update button to change the entry's In and Out points or filename.



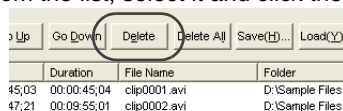
Info

While you can arrange clips on the batch list in a different order from how they appear on the tape, this will slow capturing. Be careful not to capture beyond the recorded section of the tape, or mark points in unrecorded segments. You may have problems if you mark in points that occur within the first 10-20 seconds of the tape.

- To change the position of a capture list entry, select it and click the **Go Up** or **Go Down** buttons. Sometimes it is helpful to rearrange clips if you have marked them in a different sequence than in which they occur on the tape.



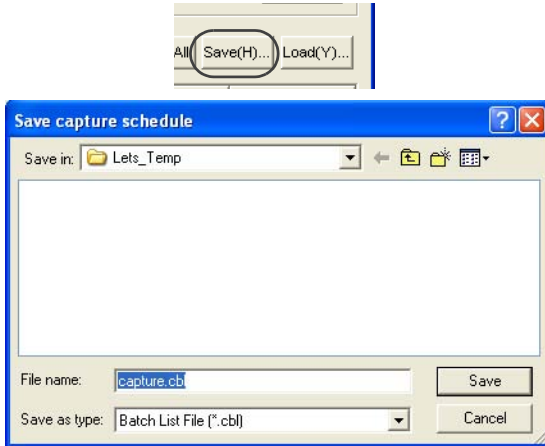
- To delete a clip from the list, select it and click the **Delete** button.



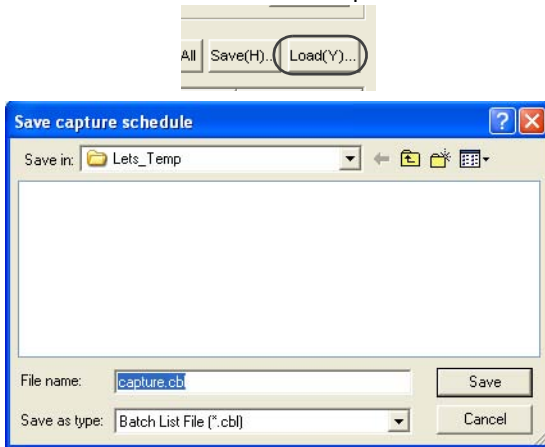
- To delete all entries from the list, click the **Delete All** button.



6. You can save the list of clips to a capture list file by clicking the **Save** button. A dialog will appear to let you name the file. It is useful to save capture lists for projects in the event you need to recapture clips from the master tape in the future.



7. You can load a list of clips from a capture list file by clicking the **Load** button. Locate the capture list file you want to load and click the **Open** button. The list will be loaded onto the capture list field.



Important note about Timecode

If your tape has discontinuous timecode, or timecode that repeats the same value, you may have problems using batch capture. Let's EDIT 2 may not be able to find the In/Out frame if it scans beyond the current set of timecode.

Thus, it is very important to keep timecode continuous on your tape. It is a common practice to “black” or “stripe” new tapes by recording black over the entire tape in one pass to establish continuous timecode.

Timecode is normally reset when the tape is removed from the camera. If you have to remove and reinsert a tape, rewind it to the top and fast forward again before recording again.

Also, it is good practice to record 10-20 seconds of black “leader” at the beginning of each tape.

When you need to capture clips from a tape that has discontinuous timecode, use the Seamless Capture or Manual Capture.

See Also

- “Manual capture” on page 12.
 - “Seamless capture” on page 67.
-

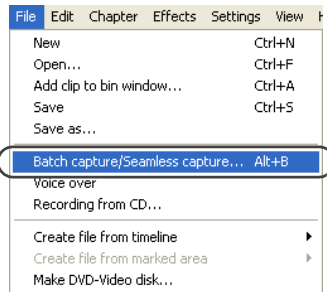
Seamless capture

Seamless capture allows you to capture a segment of video as a series of separate AVI files. Seamless capture is useful when you need to take captured files to other programs and to split a captured segment across drives or directories.

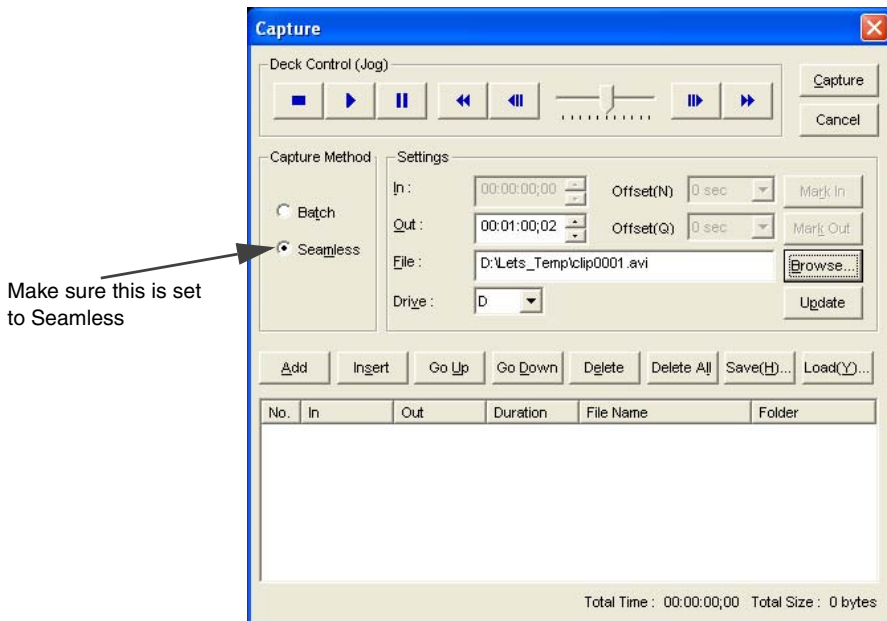
To bring up the Seamless Capture window:

Choose **File > Batch capture/Seamless capture**.

Choose File > Batch Capture/Seamless capture



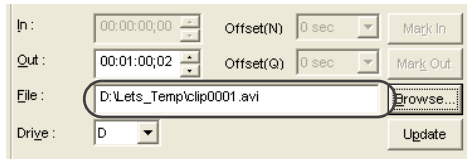
The **Capture** window appears. Make sure the **Seamless** radio button is selected.



Batch capture/Seamless capture window

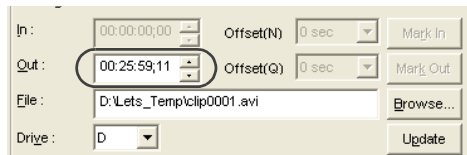
Chapter 3 : Using Let's EDIT 2

1. Set a filename for the clip you want to capture. If you have a dedicated video drive, make sure you are capturing to it.



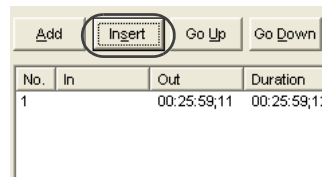
Set the file name

2. Determine the length of the clip you want to capture, subtract one frame, and enter this value (in hours, minutes, seconds and frames) in the Out box. The one frame subtraction is necessary since the first frame captured is 00:00:00;00.



Set capture length

3. Click the **Insert** button. The file name and duration will appear in the clip list.



No.	In	Out	Duration
1	00:00:00,00	00:25:59,11	00:25:59,11

4. If you wish to add more time (files) to the capture, repeat steps 4 and 5. Let's EDIT 2 automatically increments the file name for you.

5. To prepare your tape for capturing, use the method below that applies to your system.

For DV sources, use the Deck controller to position the tape slightly before the start of where you want to capture.

Position the tape slightly before the start of where you want to capture by using the Deck controller.



For analog sources with using the media converter, use the controls on your camera or deck to pause playback slightly before the start of where you want to capture.

6. To begin capturing video, use the method below that applies to your system.

For DV sources, click the **Capture** button. Capture will begin and the video will be captured to the file(s) you specified in the capture list.

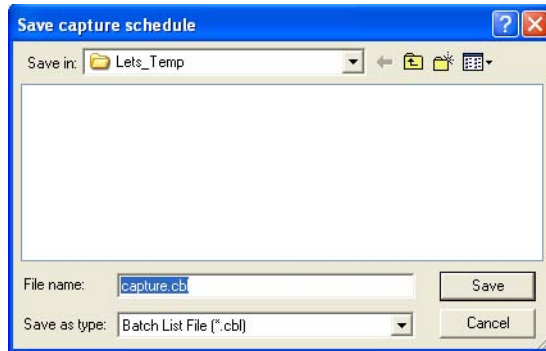


For analog sources, un-pause your camera or deck using its controls, then immediately click the **Capture** button.

7. After capturing is complete, the clip(s) will appear in the Bin window.

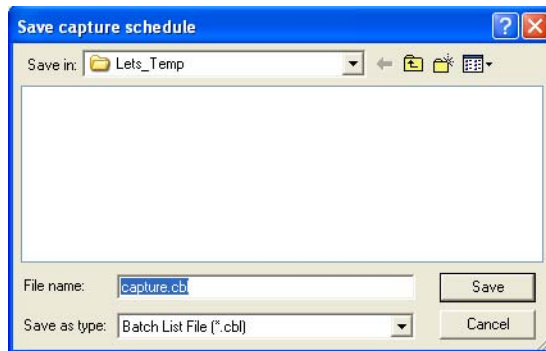
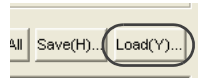
Changing, Saving, and Loading Capture lists

You can save the list of clips to a capture list file by clicking the **Save** button. A dialog appears to let you name the file.



To load a list of clips from a capture list:

1. Click the **Load** button. Locate the capture list file you want to load and click **Open**. The list will be loaded onto the capture list field.



Recording from CD

You can record audio data from an Audio CD to use it on the timeline as an audio clip.

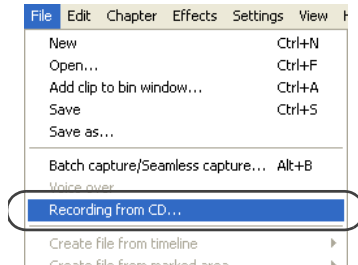
1. To bring up the Capturing CD Window:

Click the **Import Audio-CD** button or choose **File > Recording from CD**.

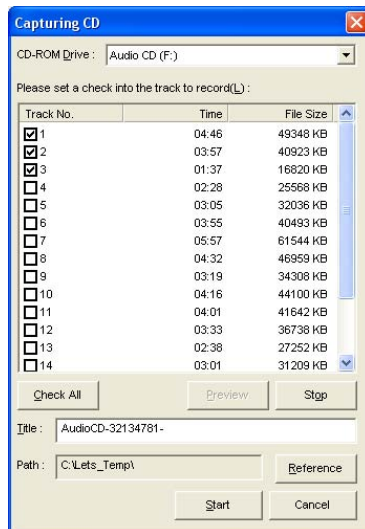
Click the **Import Audio-CD** button



Choose **File > Recording from CD**



2. The Capturing CD Window appears. Select which CD-ROM Drive to use from the pull-down menu, if multiple CD-ROM drives are present. When only one CD-ROM drive is available, it will be detected and selected automatically.



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3. List of the audio tracks is shown. Check the tracks you want to import.
4. Specify the filename and the location to store.
5. Click the **Start** button to start recording.

The audio tracks are recorded in WAV files, and are placed in the Bin window, when recorded.

Loading clips to edit

Before you can work with any audio, video, or still images in Let's EDIT 2, you need to make them available. You can make them available by loading them into the DV Bin.

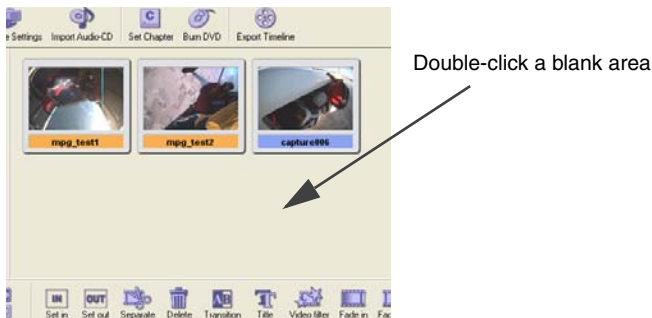
Follow the steps below to load a clip into the DV Bin.

1. Open the **Add clip to bin window** dialog by clicking the **Add Clip** button on the toolbar, by double-clicking a blank area in the DV Bin, or by choosing **Add clip to bin window...** from the File menu.

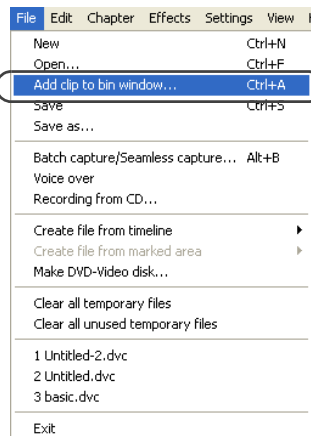
Click the Add clip to bin window button on the Toolbar



Or double-click a blank area in the DV Bin

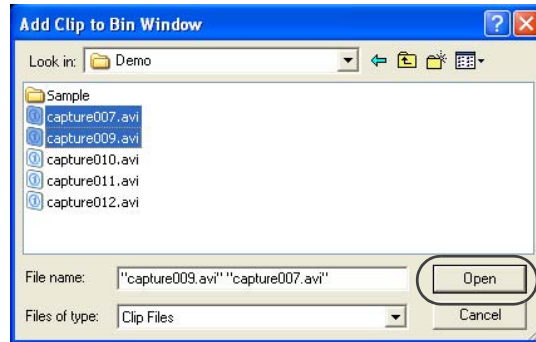


Or choose Add clip to bin window from the File menu



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2. The Add clip to bin window dialog will appear. Select one or more files to load and click the **Open** button.



3. The clip(s) you selected will appear in the DV Bin.

Supported clip types

Let's EDIT 2 supports the following types of files as clips:

1. Video for Windows (.AVI) files compressed with Canopus DV CODEC, frame size 720x480 (NTSC) or 720x576 (PAL)
2. MPEG1/2 (.mpg, .mpv, .m2p, .m2v)
3. PCM Wave (.WAV) files at 32 kHz 16-bit stereo, 44.1 kHz 16-bit stereo, or 48 kHz 16-bit stereo.
4. Windows Bitmap (.BMP, .DIB, .RLE) still images
5. FlashPix (.FPX) still images
6. Compuserve Graphic Interchange Format (.GIF) still images
7. Joint Photographic Experts Group (.JPG, .JPEG) still images
8. JFIF (.JFIF) still images
9. PICT (.PIC, .PCT, .PICT) still images
10. MacPaint (.PNTG, .PNT, .MAC) still images
11. Adobe Photoshop PSD (.PSD) still images
12. QuickTime Image (.QTI, .QTIF) still images
13. Silicon Graphics (.SGI, .RGB) still images

14. Truevision TARGA (.TGA, .TARGA, .VGA, .ICB, .VST) still images

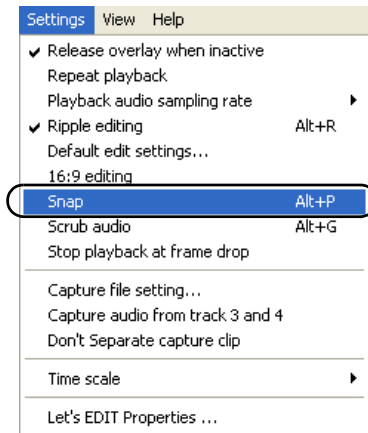
15. Tagged Image File (.TIF, .TIFF) still images

16. Title Data File (.TDF) Let's EDIT title data files

If you want to use files of other types in your project, you will need to convert them to one of the above types using a third-party program. Let's EDIT 2 will not accept other types of files. Also, you cannot mix NTSC and PAL clips on the same timeline.

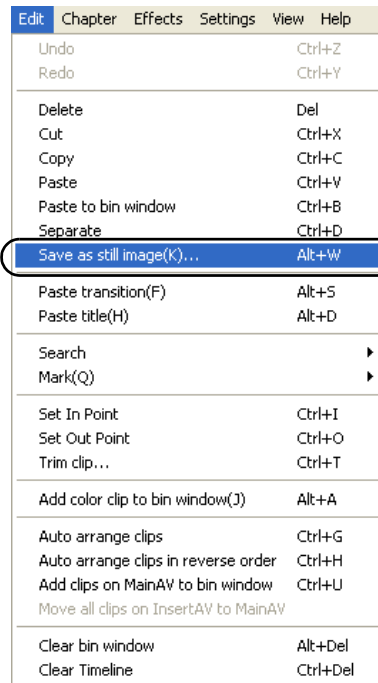
Snapping to clip boundaries

When dragging clips in the timeline, you can have the clip snap to the nearest clip boundary or separation. In the **Settings** menu, check **Snap**.

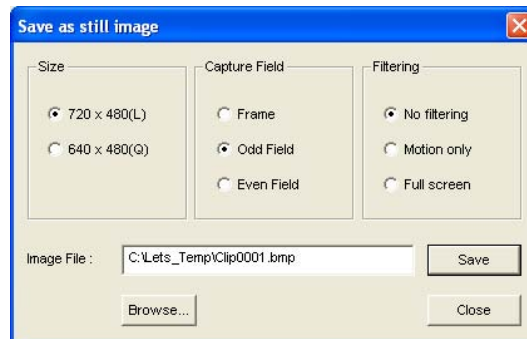


Saving still images

You can save the image at the timeline cursor as a still image file.



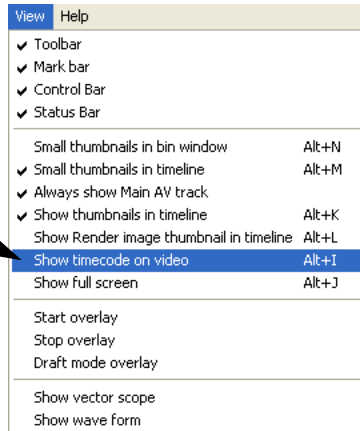
Select **Save as still image** from the Edit menu to open the Save as still image dialog.



Displaying time code on the video

Time code can be displayed on the video output (both analog and DV) by selecting **Show timecode on video** in the View menu. The timecode starts at 00:00:00:00 at the beginning of the timeline.

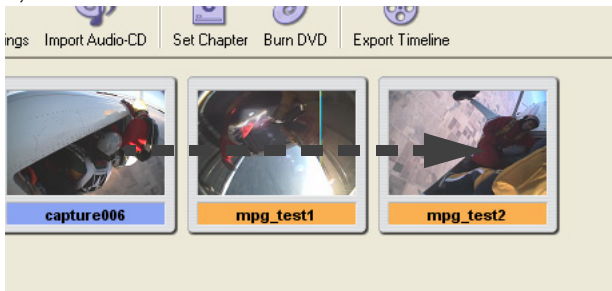
Check this option to display timecode on the output video



Working with Clips in the DV Bin

Arranging clips

To move a clip in the DV Bin, click on it and drag it over the clip you want to move it to, then release the mouse button.



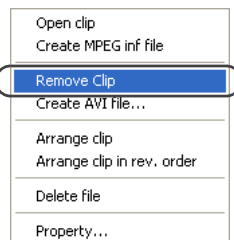
Trimming clips

A clip in the bin can be edited without changing the original file. You can trim the clip by setting IN/OUT points.

You can also create multiple different clips out of an AV file, setting IN/OUT points.

Removing clips

To remove a clip from the Bin window, right-click on it and choose **Remove clip**.



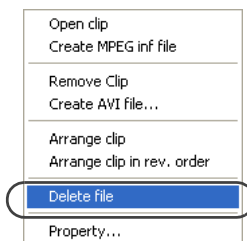
Deleting clips from the hard drive



Warning

Be very careful when using this option, as the file will completely be lost.

You can delete a clip from the hard drive by right-clicking on it and choosing **Delete file**.



Working with Video Clips on the Timeline

Arranging clips

To move a clip on the timeline, click on it and drag it to a new position.

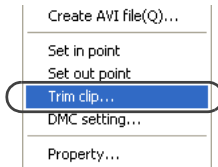
Trimming clips

A clip in the bin can be edited without changing the original file. You can trim the clip by setting IN/OUT points.

You can trim a clip on the timeline in one of three ways:

1. Drag the end of the clip using the mouse.

2. Right-click on the clip and choose **Trim clip** to bring up the trimming dialog.



3. Move the timeline cursor to the desired IN or OUT point and click the **Set In** or **Set Out** button on the Edit toolbar.



Any of the methods will work, it's just a matter of individual preference and situation. If you know the timecode you want to trim at, the trimming dialog is the most efficient. If you need to be precise and view the entire video file, opening the clip in the preview dialog by double clicking it on the Bin window is the most effective. If you just need to shorten or lengthen the clip slightly, dragging the clip ends is the fastest.

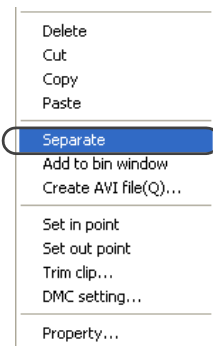
Separating clips

You can separate a video clip into two clips by The clip will be separated at the timeline cursor position. Clicking the **Separate** button on the toolbar, or by right-clicking on the clip and choosing **Separate** from the pop-up menu.

Click the Separate button on the toolbar



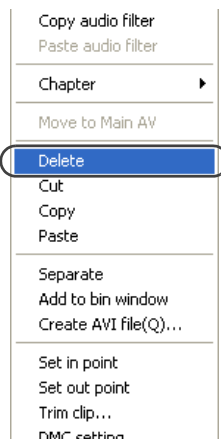
Or choose Separate from the right-click menu



Removing clips

To remove a clip from the timeline, right-click on it and choose **Delete**.

You can also remove a clip from the timeline using the Delete button on the Edit Toolbar.



Setting chapters on the timeline

Adding chapters

You can set chapters on your editing timeline, so that they can be set as the index chapters when you burn DVD-video.

To add a chapter on the timeline, follow the steps below:

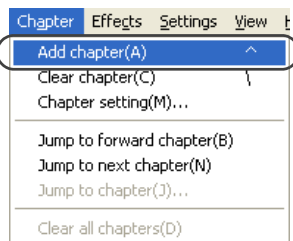
1. Place the timeline cursor on the position you wish to set a chapter.
2. From the Chapter menu, choose **Add chapter**.



Info

The chapters set on the timeline cannot be set at the exact frame when you create a DVD-Video.

The difference up to 1 second may occur on the position of chapters because of the technical reasons.



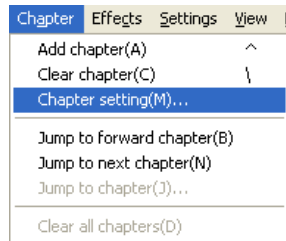
Setting overall chapters

You can also set the overall chapters automatically based on the cut points or regular intervals.

To use automatic chapter setting, follow the steps below:

1. Open the Chapter Settings dialog by either of the following method.

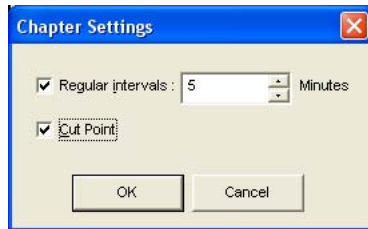
From the Chapter menu, choose Chapter setting



Click the **Set Chapter** button



2. In the Chapter Settings dialog, choose method to set the chapter.



Check **Regular intervals** and specify the interval, to set chapters at regular intervals.

Check **Cut Point** to set the chapter at all the cut points of the Main AV track.

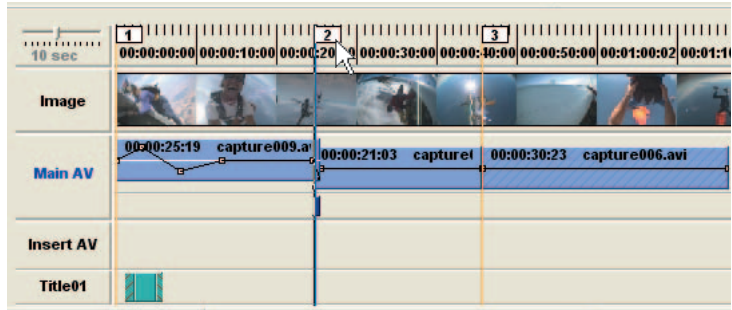
Chapter 3 : Using Let's EDIT 2

Editing Chapters

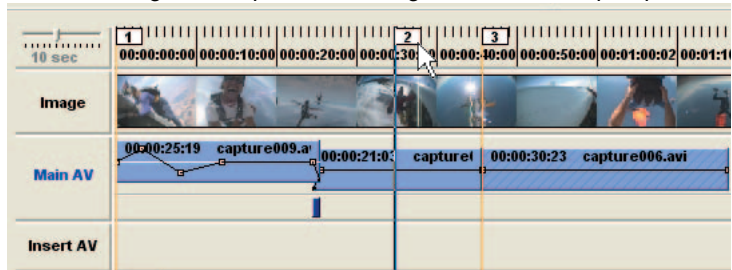
You can also move/remove chapters you have set on the timeline.

To edit chapters, follow the steps below:

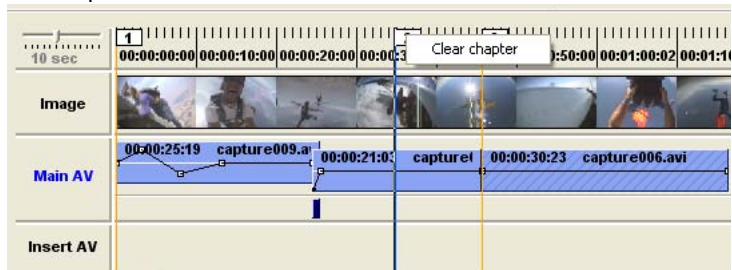
1. Place the cursor on the Chapter flag to edit.



2. Click and drag the Chapter marker flag to move the chapter position.



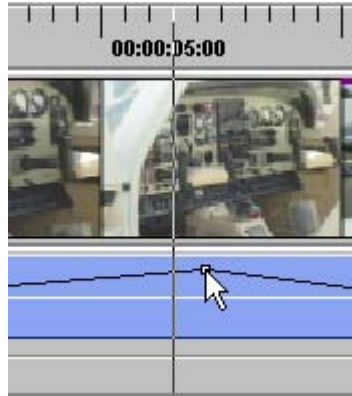
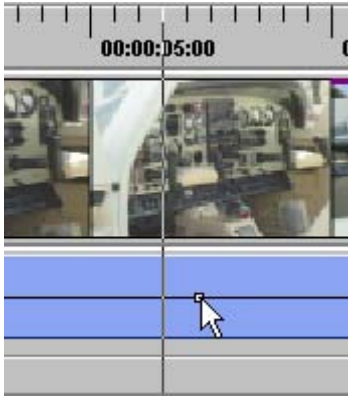
3. Right-click on a chapter marker flag and select Clear chapter to remove the chapter.



The chapter numbers are automatically defined. When the order of the chapters is changed by moving or removing ones, the chapter numbers will automatically be updated.

Adjusting Audio levels

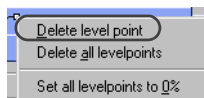
The line in the middle of the clip represents its volume level. To adjust the audio levels of your clips, click on the line to add a node, then drag the node up or down to adjust the level.



You can also adjust the levels of all the level points in a clip by holding down the **Shift** key, placing the mouse cursor over the audio line, and dragging up or down.

You can adjust the levels of all the clips in the Main AV track by holding down the **Shift** and **Ctrl** keys, placing the mouse cursor over the audio line, and dragging up or down.

To delete an audio node, right-click on it and choose Delete level point.



Moving clips between tracks

You can move clips on the timeline from track to track. Left-click and drag the clip to another track or to the bin window. To copy a clip, hold down **Ctrl** key while dragging the clip.

Clip interlocked trimming

You can change the length of clips without changing the overall time. Move the mouse pointer to the separation between two clips and hold down the

Alt key. The cursor will change into a



Out In

cursor. Click and drag the

separation to move the in and out points of the two clips together. This has the effect of moving the separation.

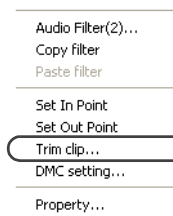
Working with Audio Clips on the Timeline

Arranging clips

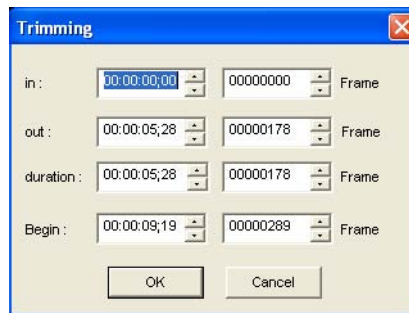
To move a clip on the timeline, click on it and drag it to a new position.

Trimming clips

An audio clip in the timeline is just a reference to a start and end point in a file. Thus, multiple clips in the timeline can point to different sections of the same file.

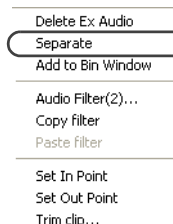


Specify new value of time or the frame.



Separating clips

You can separate an audio clip into two clips by right-clicking on the clip and choosing **Separate** from the pop-up menu. It will be separated at the timeline cursor position.



Removing clips

To remove a clip from the timeline, right-click on it and choose **Delete Ex Audio**.



Moving clips between tracks

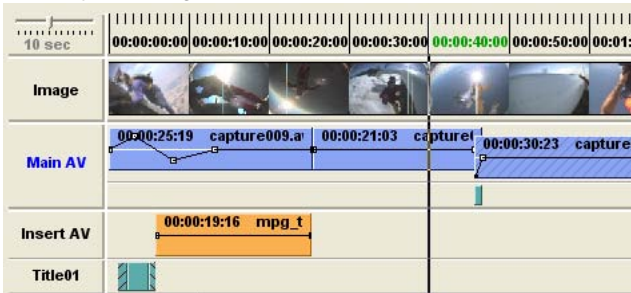
You can move clips on the timeline from track to track. Left-click and drag the clip to another track or to the bin window. To copy a clip, hold down **Control** while dragging the clip.

Using the Insert AV track

The Insert AV track allows you to cut away to a another piece of video, then cut back.

Place a clip on the Insert AV track to insert it over the Main AV video. Both audio tracks (Main AV and Insert AV) remain audible unless you mute one.

To position an Insert AV clip while viewing the location to insert, hold down the **Control** key and drag the clip.



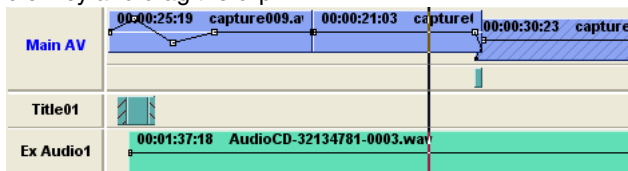
Note: When Main AV clips are added or deleted, the Insert AV clips may no longer be at the same position corresponding to the Main AV clips. To prevent this from happening, make sure **Ripple Editing** is checked in the Settings menu.

Using the Ex Audio tracks

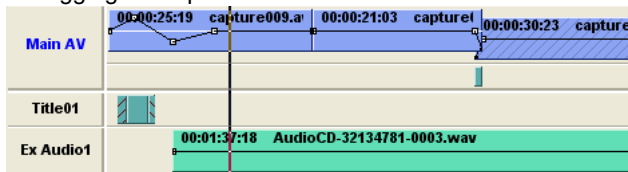
The Ex Audio tracks provide extra places to add additional audio such as music to your production.

To add audio to the Ex Audio tracks, drag a WAV clip from the DV Bin to one of the Ex Audio tracks.

To position an Ex Audio clip while viewing the location to insert, hold down the **Control** key and drag the clip.



To position an Ex Audio clip by scrubbing a specific video frame, position the timeline cursor at the frame you want to scrub, then hold down the **Shift** key while dragging the clip.

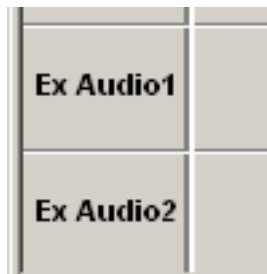


You can disable the Ex Audio tracks (keep Ex Audio from playing) by clicking on the **Ex Audio** label next to the track. When the label is white, the track is disabled. When the label is black, the track is enabled.



Tips

You can also add AVI or MPEG file to the EX Audio track of the Timeline. With a video clip added on the Ex Audio track, its embedded audio data is used as additional audio to the Main AV track.

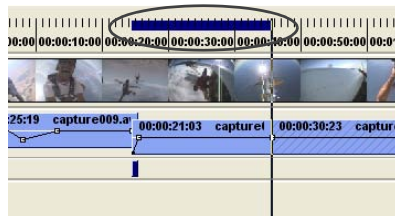
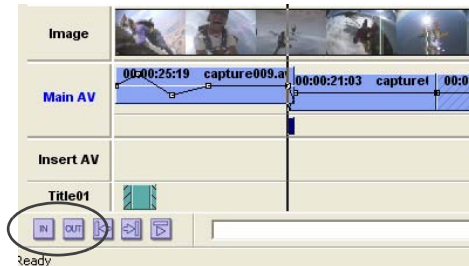


Click the Ex Audio 1 or Ex Audio 2 label to mute or play the track

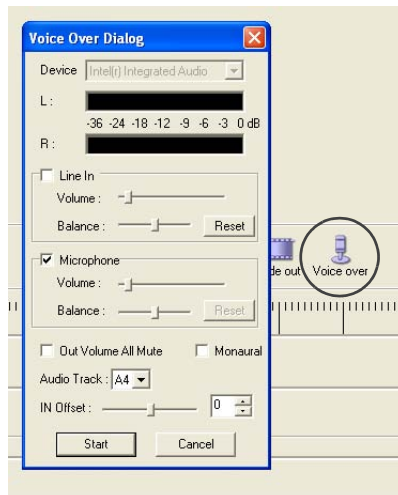
Voice over

Narration can be added to the Ex Audio timeline. You will need to connect a sound input device such as a microphone to the line in or microphone jack of your personal computer.

1. Set the narration range by marking **IN** and **OUT** points. After setting the narration range, a blue line will appear over the time scale to indicate the selected area.



2. Click the **Voice over** button in the Edit Toolbar or select **Voice over** from the File menu. The Voice Over Dialog will appear.

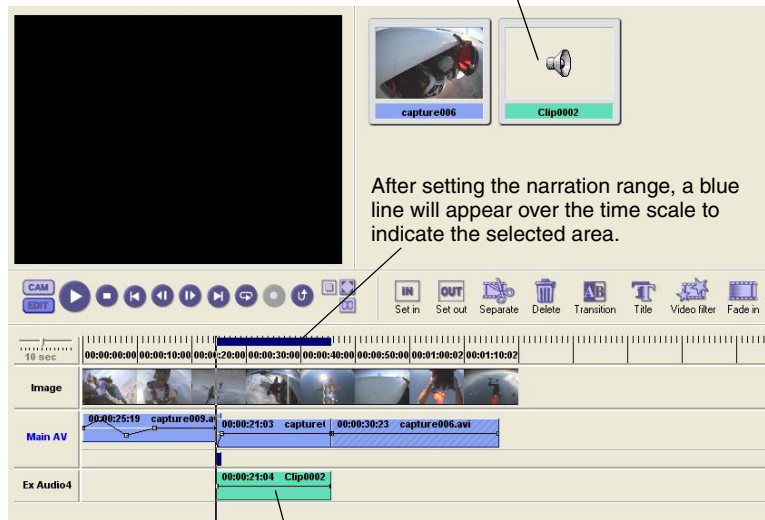


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3. Check that the sound input device is connected to your computer, and select **Line In** or **Microphone**, depending on which jack the device is plugged into. Adjust the input volume in this setting window if required.
4. Click the **Start** button. The timeline cursor rolls back 3 seconds before the **Set Mark IN** point specified in step 1, then recording starts.

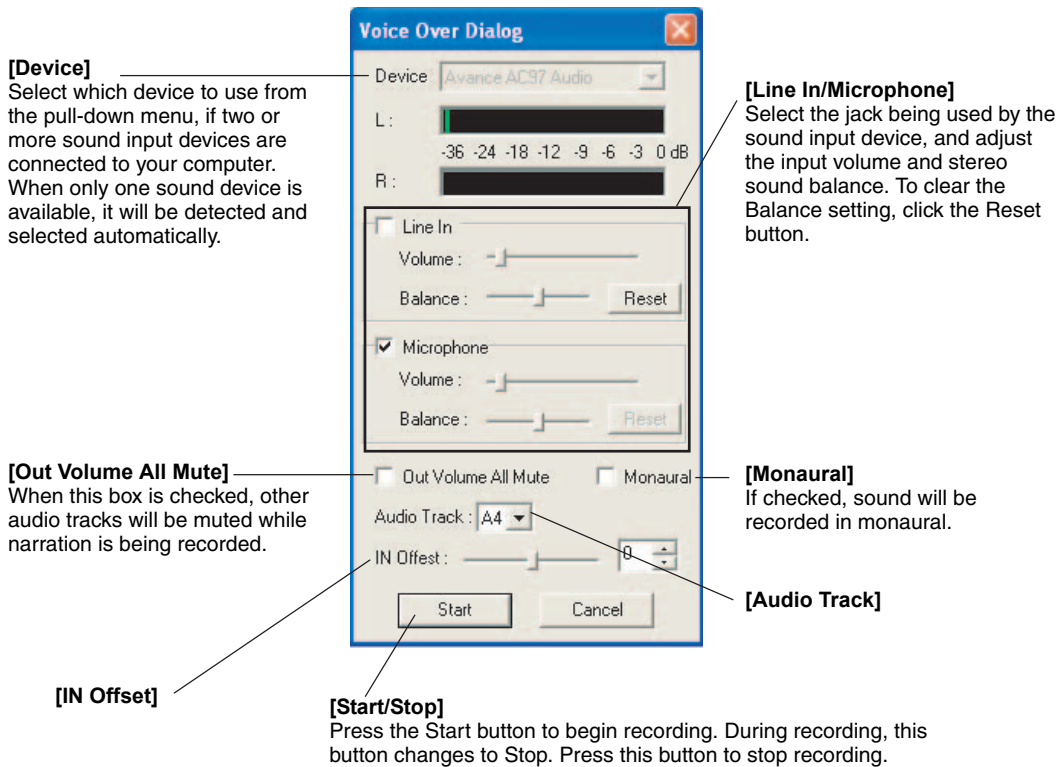
When the timeline cursor reaches the end of the selected narration range, the timeline cursor moves three more seconds over the specified **Set Mark OUT** point and stops. The recorded narration will be displayed on one of the Audio tracks, and will be placed as a new audio clip in the DV Bin.

The recorded narration will be displayed on one of the Audio tracks, and will be placed as a new audio clip in the DV Bin.



After setting the narration range, a blue line will appear over the time scale to indicate the selected area.

Recorded narration



Using 4-channel audio

Some DV devices support 4-channel 32kHz 12-bit audio.

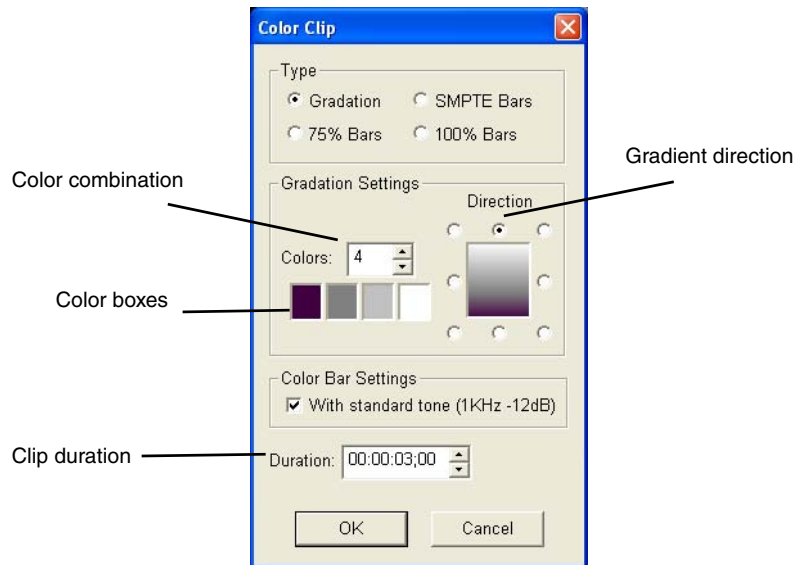
To capture the extra channels from tape, make sure **Capture audio from track 3 and 4** is checked in the Settings menu, and use Batch or Seamless capture to capture the video. For each file captured, there will be a corresponding WAV file with the same name. The file will have the audio from channels 1 and 2 along with the video, and the additional WAV file will have the audio from channels 3 and 4.

Adding Graphics and Backgrounds

Let's EDIT 2 allows you to add colors clips (solid colors, gradients, and color bars) and bitmap graphic files. These files can be placed into either the Main AV or Insert AV tracks and work almost identically to video clips. In addition, you can also make transitions into these files and title over the top of them.

Adding color clips

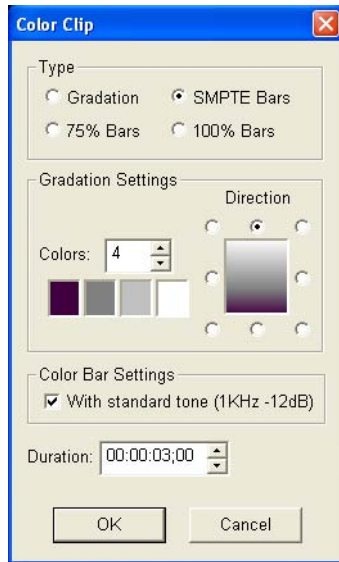
1. To add a color clip, choose **Add color clip to bin window** from the Edit menu.
2. The Color Clip dialog will appear.
Select **Gradation** as the type.
Click on a color box to select a color.
For a solid color, make sure the **Colors** box is set to 1. For a gradient, set **Colors** to 2 or more, and set the gradient direction using the **Direction** radio buttons.



After you have defined your color clip, click OK. The color clip will be placed into the DV Bin.

Adding color bars

The Color Clip dialog also includes three options for color bars. Check the **With standard tone (1 KHz - 12 dB)**, to add a standard reference tone to the clip.



Color Clip

Adding a still image

To add a still image, load it into the DV Bin just like a normal clip and drag it on to the Main AV or Insert AV track.



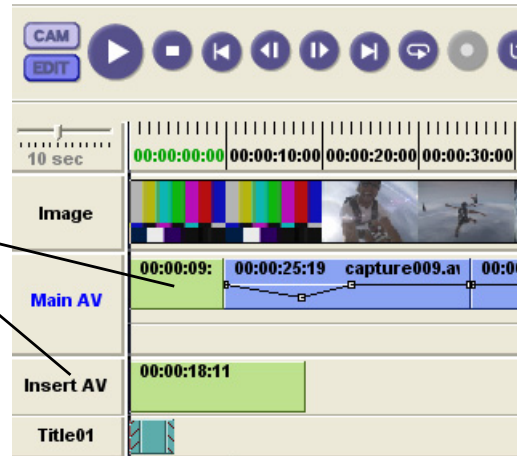
Info

The still image on the Bin, Timeline, or Title of the Let's EDIT 2, will automatically be updated when you edit it by the other application.

Adding color clips and still images to the timeline

To add a color clip or still image to the timeline, drag it from the bin into the timeline.

Color clips and still images can be placed in the Main AV and Insert AV tracks.



Working with color clips and still images on the timeline

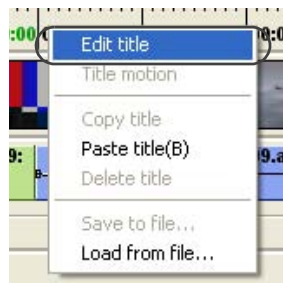
Color clips and still images work in the same way as video clips in the timeline.

Still image with the alpha channel information

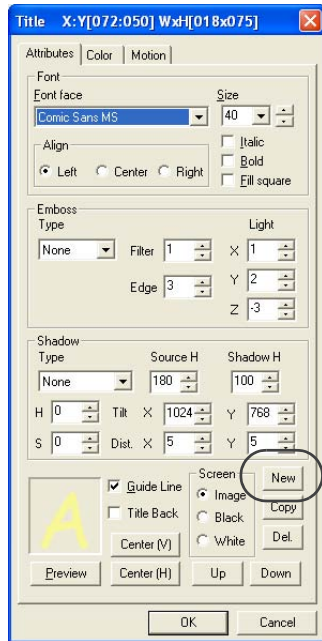
Some of the still images have alpha channel information. If you add those images onto a title track, you can use the beautiful image as the title of your video.

To load a still image onto a title track, follow the steps below:

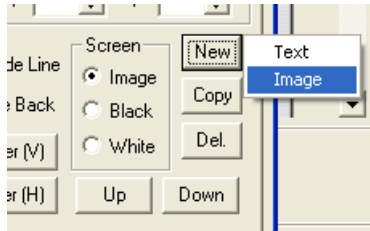
1. Right-click on the title track and choose **Edit title** to open the **Edit Title** dialog.



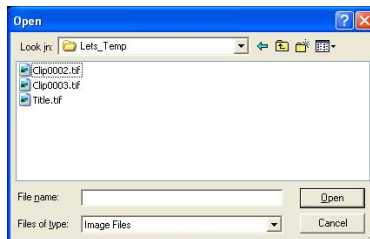
2. Click the **New** button.



3. Choose **Image** from the contextual menu.



4. Choose a still image to use.



Adding Transitions

Transitions can be added between clips on the Main AV line. The first clip is often referred to as Video A and the second clip is often referred to as Video B.

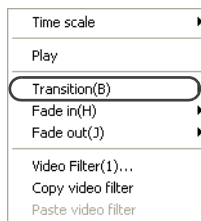
There are three ways to add a transition:

1. Click the **Transition** button on the toolbar.

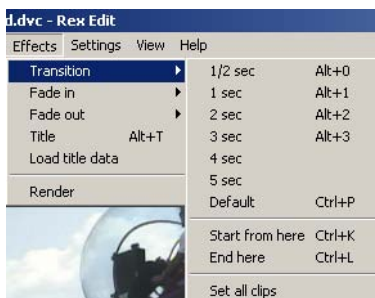


Add transition button

2. Right-click and select a transition duration from the pop-up menu.

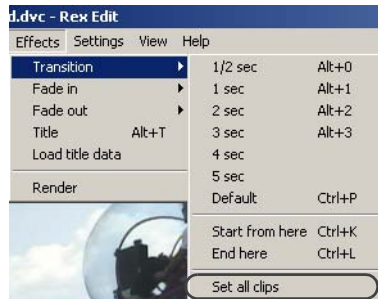


3. Choose a transition duration from the Effects menu.

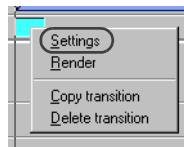


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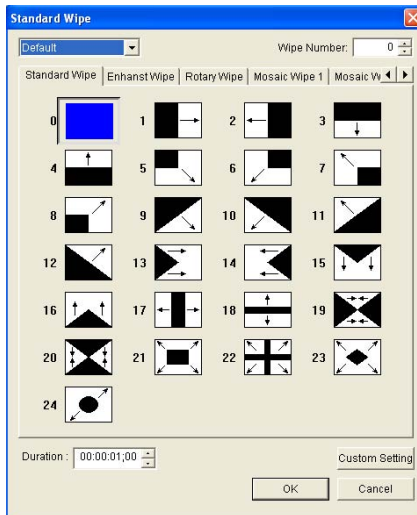
You can also have Let's EDIT 2 add the default transition to all separation points on the Main AV track that do not have transitions by choosing **Set all clips** from the Effect menu.



To change the settings of a transition on the timeline, double-click it or right-click it and choose **Settings**.



The Standard Wipe dialog will appear.

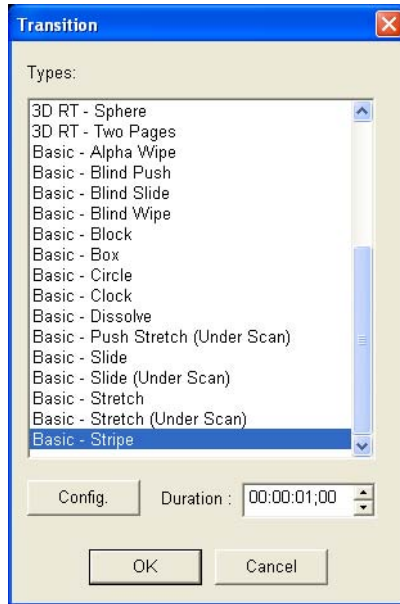


Choose a transition from the Standard Wipe dialog.

You can change the duration of the selected transition by changing the number in the **Duration** box.

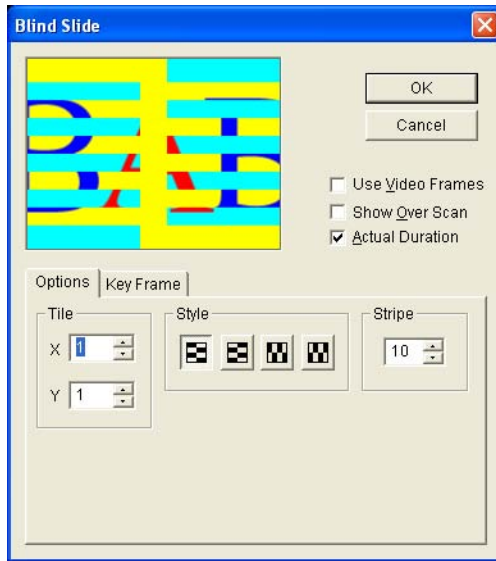
Chapter 3 : Using Let's EDIT 2

To customize transition, click **Custom Setting** button in the Standard Wipe dialog, then Transition dialog will appear instead.



Customizing Transitions/Using 3D Transition (Canopus 3D-RT)

You can bring up the configuration settings for the selected transition by clicking the **Config** button.



Transition settings

You can control the speed and progress of transitions by using the Key Frame settings. All Basic transitions include the key framing ability, as well as other options unique to each transition.

For a detailed explanation of each transition's options, see chapter 4 "Transition Settings".

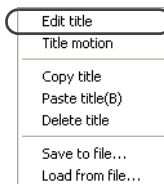
Adding Titles

To add a title to your production, click the **Title** button on the Edit toolbar, or right-click in the Title track and choose **Edit title** from the pop-up.

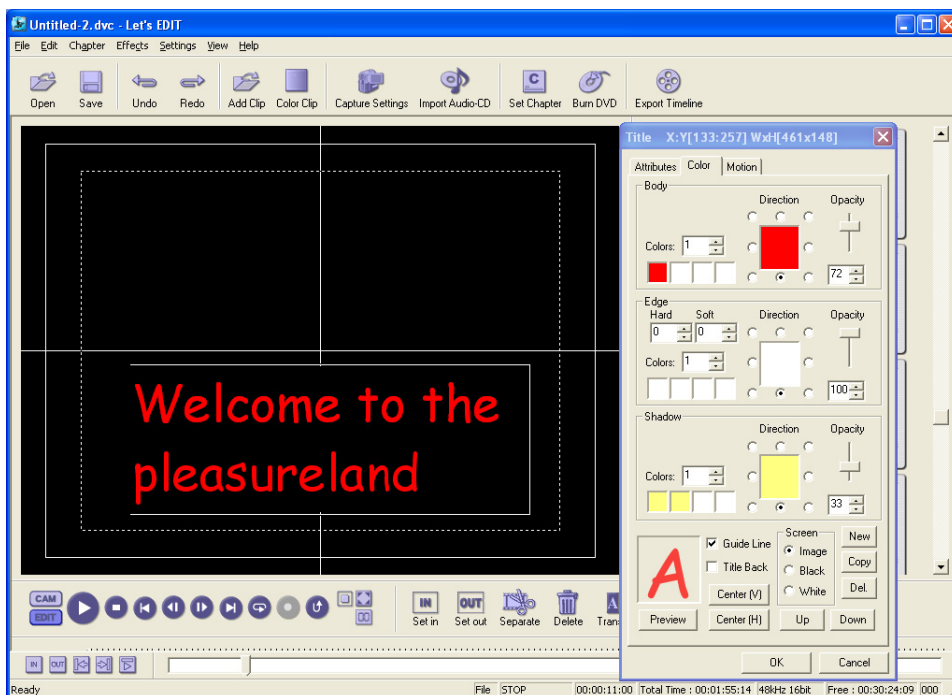
Click the Title button



Or choose right-click in the Title track and choose Edit title



The Titling interface will appear.



Titling interface

Entering Title Text

Enter text in the title display by double-clicking the block. You can enter text from the keyboard or paste from the clipboard. You can use any Windows TrueType font that is installed on your system.

Positioning Titles

Click the mouse outside of the title text, so the box appears with a dotted line. Click and drag the title where you want it to be.

Title Attributes

Font

Select type-face, style, size and alignment.

Emboss

There are 2 emboss styles:

Inside, fits the effect within the character outline.

Outside, puts the effect outside the character outline.

Shadow

There are 3 shadow styles:

Projection, is a drop shadow

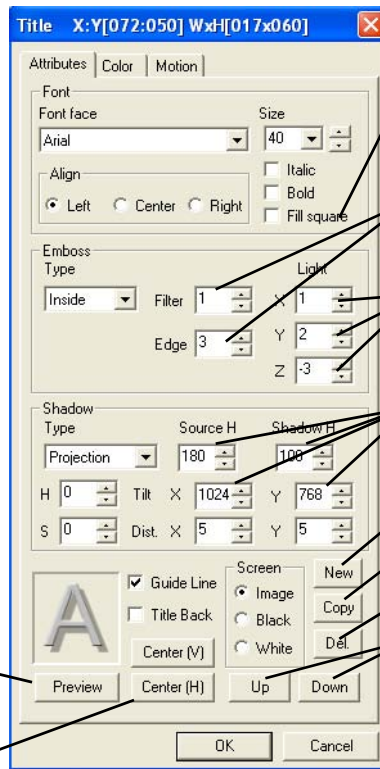
Slant, is a cast shadow

Perspective, is a shadow with a vanishing point.

H & S adjust the hard edge and soft edge properties of the shadow.

Preview renders the changes to preview.

Center (V) & (H) center the title on screen



Fill square fills the font location with a solid rectangle of color

Filter & Edge determine the thickness of the emboss

Light determines where the light source is located for highlight

SourceH/ShadowH/Tilt/Dist determine height relationship between the light source and shadow

New adds a new title line

Copy copies the title line

Del deletes current line

Up/Down move the selected text line up or down in layers

The title attributes tab allows you to change various settings of the title text. You can specify the font, add embossing, add a shadow, and center the title horizontally or vertically from this dialog.

Chapter 3 : Using Let's EDIT 2

Title Color

The color tab allows you to set the color properties of the font, edge and the shadow. You can also set transparency for the font, edge, and shadow.

Colors determines the color of the font.

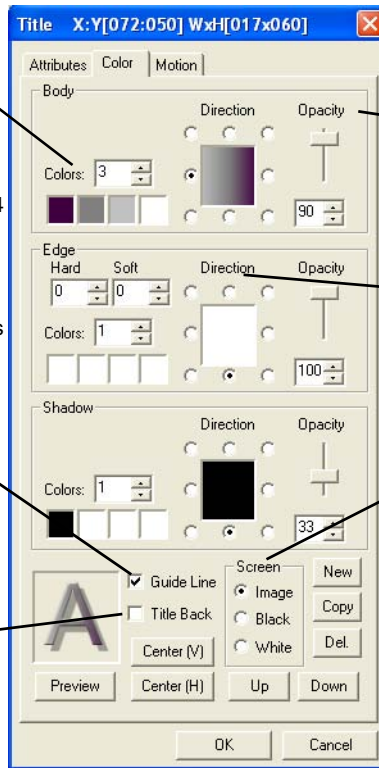
- 1 is a solid color
- 2 is a gradient between 1 and 2
- 3 is a combination of 1, 2 and 3
- 4 is a combination of 1, 2, 3 and 4

To change the box color click on one of the boxes.

Note: Fonts, Edges and Shadows can all be set in the same way using solid colors, gradients and transparency.

Guideline display's a safe titling area to make sure your titles display within the video picture.

Title Back displays a white background to help you see the complete title if the video and title are too similar in color.



Opacity adjusts the degree of transparency. 100 is solid, 0 is transparent. Characters, shadows and edges can be transparent.

Direction adjusts the direction of the gradient fill.

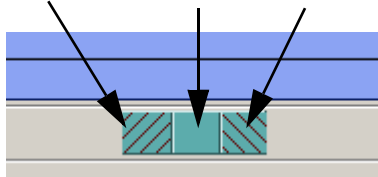
Screen allows you to preview the title over either: the video, a black background or, a white background.

Title Motion

After you have created a title and selected its font and shadow characteristics you are ready to add motion to move your title on-screen.

Title motion consists of 3 segments: **In motion**, **Hold** and **Out motion**.

In motion Hold Out motion



These three segments can be adjusted manually by dragging the boundaries which separate them. You can also adjust the In motion, Hold and Out motion in the Motion tab of the Titling dialog.

In point displays the in-point of the title in the timeline. To adjust this setting you can:
1/ manually enter the in-point
2/ place the timeline cursor and click **Set In point**.

Motion displays the title motions you can use. **In motion** refers to the motion when the title comes on screen. **Out motion** refers to the motion when the title leaves the screen.

Start/end in motion adjust the Start/end point of the title clip. Click this button if you have scrubbed to a new title in or out point.

Loop play will play the current video clip as defined by the title duration.

Hold displays the hold-time for the title after it comes on screen.

Go in start/end goes to the end or start of the title **In motion**.

Go out start/end goes to the end or start of the title **Out motion**.

Chapter 3 : Using Let's EDIT 2

Working with title layers

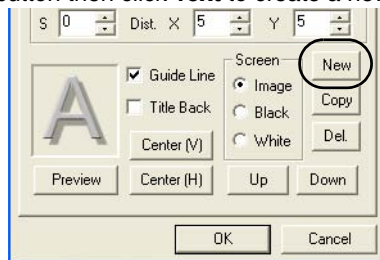
A single title can have multiple layers of text. Each layer can have text of different attributes. However, all layers share the same Motion settings.



Layered title example

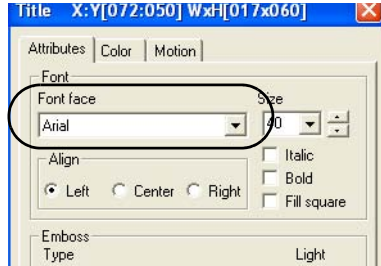
The title shown above was created by doing the following steps.

1. Create a new title.
2. Enter the text "Foo" in the title box.
3. Move the title box to the upper left area of the screen.
4. Add a drop-shadow and emboss
5. Click the **New** button then click **Text** to create a new title text layer.

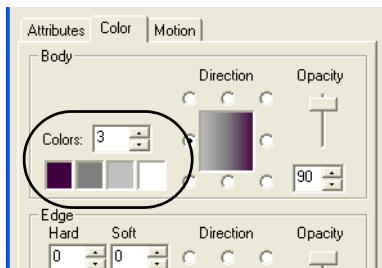


6. A new box appears. Enter "Bar" in the box.

7. Change the font to a different font.

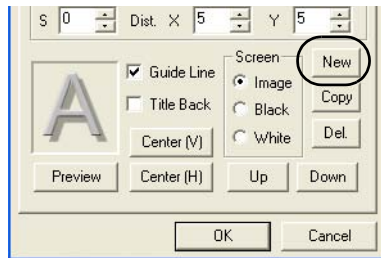


8. Change the color of the title in the Color tab.



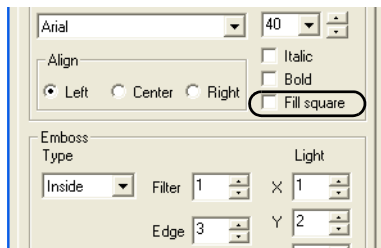
9. Move the title to the lower right area of the screen.

10. Click the **New** button then click **Text** again to create another title text layer.



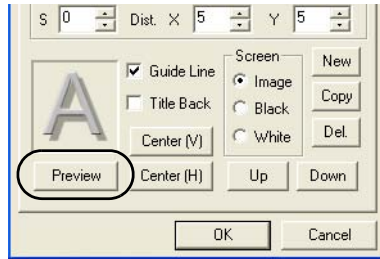
11. Enter any text in the box. The text doesn't matter - just the width.

12. Click the **Fill Square** button, this will change the title from text to a filled square.

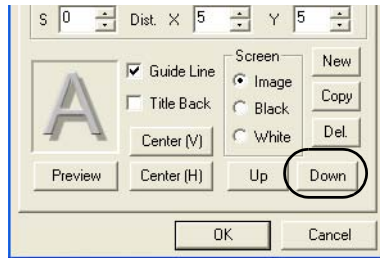


Chapter 3 : Using Let's EDIT 2

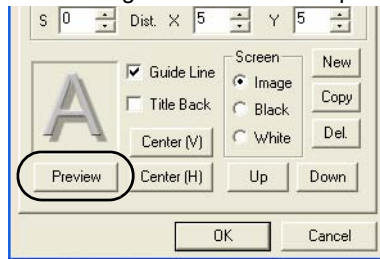
13. Change the color of the square in the Color tab.
14. Move the box so it overlaps part of the "Foo" text.
15. Click the **Preview** button to see the title. Notice how the box covers some of the "Foo" text.



16. Move the box under the "Foo" text by clicking the **Down** button until it appears below the "Foo" text.



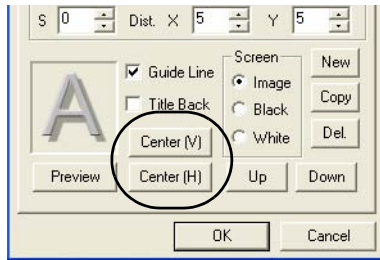
17. Click the **Preview** button again to view the completed title.



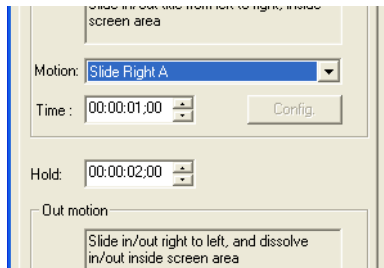
Creating scrolling titles

It's easy to create titles that scroll across the screen.

1. Create a new title.
2. Enter enough lines in the title so it takes more space than the screen.
Increase the font size if necessary.
3. Click the **Center (V)** and **Center (H)** to center the title vertically and horizontally.



4. Switch to the **Motion** tab.



5. Enter 00:01:00;00 in the In Motion **Time** box. This will set the In motion to 1 minute.
6. Enter 00:00:00;00 in the Hold box. This will set the Hold time to 0, since we don't want the title to stop.
7. Enter 00:01:00;00 in the Out Motion **Time** box. This will set the Out motion to the same time as the In motion. This is important, otherwise the In and Out scroll speeds will be different.
8. Choose **Slide Up** as both the In Motion and the Out Motion.
9. Click **OK** to accept and close the title.
10. Play the section of the timeline with the title. You will see it scroll upward across the screen.

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You can have a title scroll down, left, or right by changing the In and Out motions from Slide Up to Slide Left, Slide Right, or Slide Down.

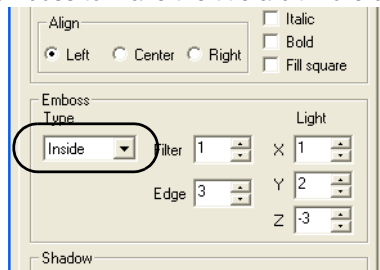
Note: You can accomplish the same effect as the steps above by setting the In motion time to 2 minutes, setting the Hold and Out motion times to 0, and moving the title so it is located completely above the screen instead of clicking **Center (V)** and **Center (H)** in step 3.

Alternatively, you could set only the Out motion time and position the title below the screen.

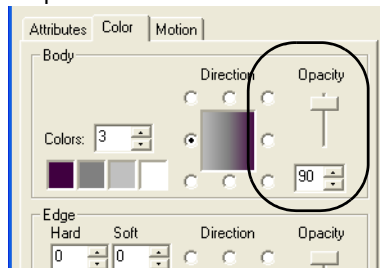
Using a Title as a Logo tag

You can use a semi-transparent title as a logo tag in the video.

1. Create a new title.
2. Position it somewhere on the screen.
3. Set an **Inside** emboss to make the title a bit more defined.



4. Change the body **Opacity** setting in the Color tab to 20. This will make the title mostly transparent.

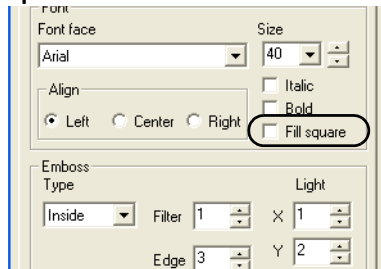


5. Click **OK** to accept the title.
6. Render the title.
7. Play the timeline to view the logo tag you made.

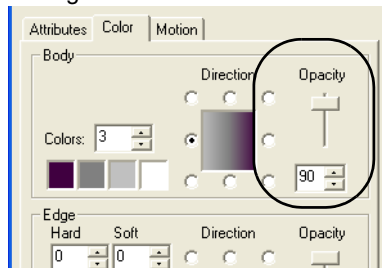
Using a Fill Square to colorize video

You can use a large semi-transparent fill square to colorize all or part of the video frame.

1. Create a new title.
2. Enter some text and make it large enough to occupy a good portion of the screen.
3. Check the **Fill square** checkbox.



4. Set the **Opacity** setting in the Color tab to 30.



5. Click the **Preview** button to preview the colorization effect.

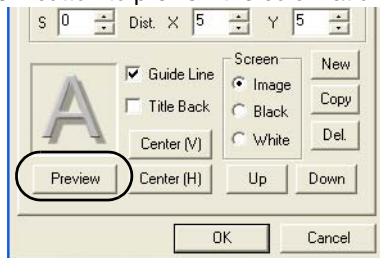
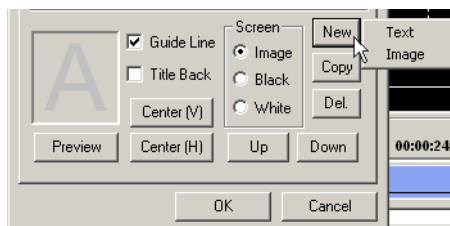


Image overlay using titles

Both text and static images can be used in titles. Static images can be superimposed over video just like text. Furthermore, TIFF and TARGA files with alpha channel information will be displayed with alpha transparency for display of images that aren't rectangular.

To use a static image in a title, click the **New** button and select **Image** from the pop-up. You can also drag and drop image clips from the Bin Window on to the title screen.



Select Image from the New tab to add an image layer

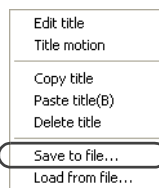
Targa (.TGA), Bitmap (.BMP), TIFF (.TIF), and JPEG (.JPG) files can be used as static images in the titler.

Alpha-channel (transparency) information is preserved for TIFF and Targa images.

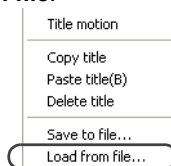
All title attributes except emboss apply to static image layers.

Saving and Loading Title data

You can save a title to a Title Data File (.TDF) for use in other Let's EDIT 2 projects. Right click the title and choose **Save to file** from the menu.



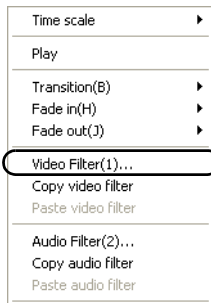
To load a Title Data File (.TDF) into the title track, right-click on the title track and choose **Load from file**.



You can also add title data files to the DV Bin as clips.

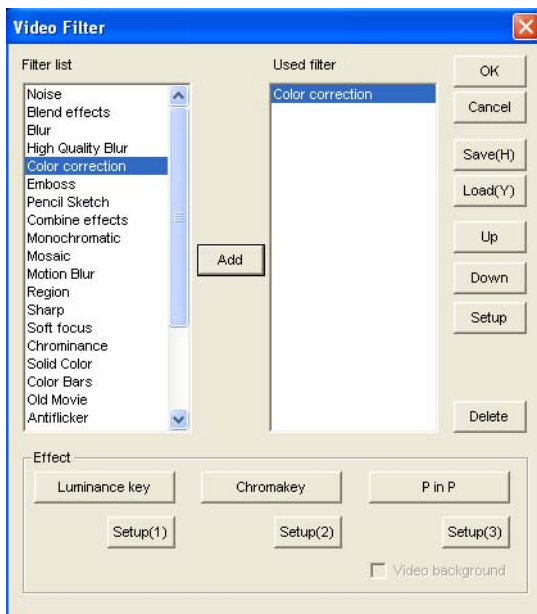
Adding video filters

To apply a video filter to a clip in the Main AV or Insert AV line, right-click on the clip and choose **Video Filter**.



Right-click on the clip and choose Video Filter

The video filter dialog will appear. The available video filters appear on the left.



The Video Filter dialog

Double-click on a filter name, or select it and click **Add** to add it to the list of used filters on the right.

To remove a filter from the current clip, select it and click **Delete**.



Tips

Before you click Setup to adjust a filter's parameters, move the Video filter dialog so it does not block the preview window. Otherwise you won't be able to see the video in the preview window while you are adjusting settings.

To access the settings for a particular filter, double-click it, or select it and click the **Setup** button. The filter settings will appear on screen. Please refer to Chapter 4 for details on the settings for each of the filters.

Video filters are applied in the order they appear in the list - to change the order that filters are applied, select a filter from the list of used filters and click the **Up** and **Down** buttons to reposition it in the list. For example, if you apply Noise then Emboss, the noise would get embossed. However, if you apply Emboss, then Noise, the noise would appear over the embossed video.

When a clip has a video filter applied to it, diagonal lines running from bottom left to upper right appear on the clip in the timeline.



Clip with video filter applied

Copying video filters from clip to clip

To copy the video filters on one clip to another clip, right-click on the clip with the filters you want to copy and choose **Copy video filter** then right-click on the clip you want to copy the filters to and choose **Paste video filter**.

Saving and Loading filter sets



Tips

If using the same set of filters in multiple projects, save the filter set in a filter data file.

You can save the current set of video filters (along with the settings for each filter) in a filter data file. To save a set of filters, click the **Save** button. A dialog will appear and you can name your filter data file.

To load a set of video filters, click the **Load** button and choose a filter data file from the dialog box. When the filter data file is loaded, its filters will appear in the used filters list and a message will appear to ask whether you want to apply the settings. Answer **Yes** to load the filter set, or **No** to go back and choose a different filter settings file (or cancel loading a filter set completely).

Rendering Filters

Since realtime editing expands with the speed of your system, there are no set limits to the number of realtime filters that you can put on a particular clip. For example, you could have a video clip with three filters - Old Movie, Color correction, and Motion blur.

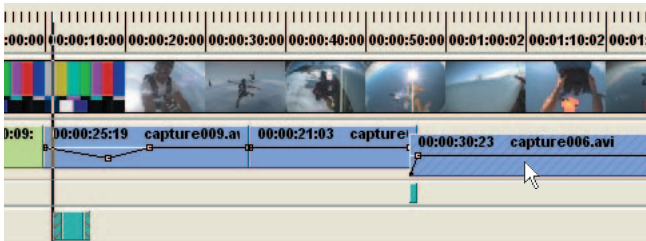
Depending on the speed of your system, you may not be able to play the filtered clip back in realtime. Playback will either stop (if set to stop playback at frame drop) or start stuttering. In such cases, you should render the clip with its filters.

The filter rendering process involves taking the source video clip, processing the applied filters, saving a new clip, and replacing the old clip in the timeline with the new clip.

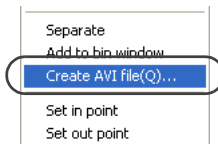
If you find you need to render the filters on a clip, follow the steps below.

1. Make sure the clip trimming filter settings are as you want them on the clip. After you render the clip and it is replaced in the timeline, you won't be able to expand the clip or change its filter settings.
2. Right-click on the filtered clip you want to render.

Right-click the video clip

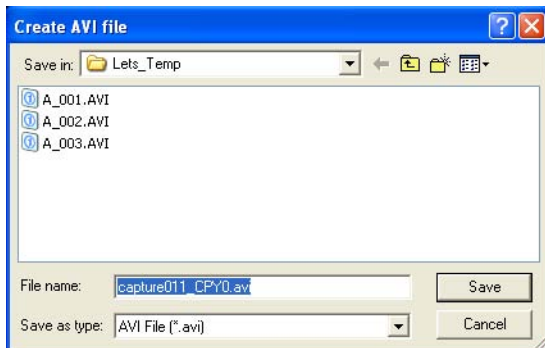


3. Choose **Create AVI file** from the pop-up menu.



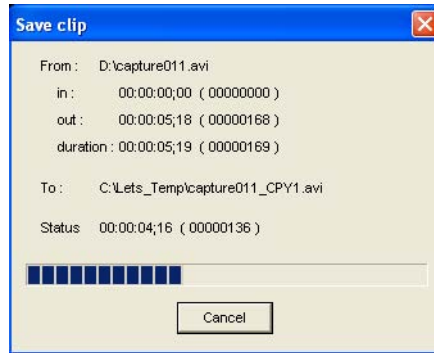
4. A file window will appear and ask you for a location and filename to save the new clip.
You can accept the default name, or rename the clip to something more appropriate.
Make sure you save the new AVI on your video drive.

Choose a location and filename for the new AVI



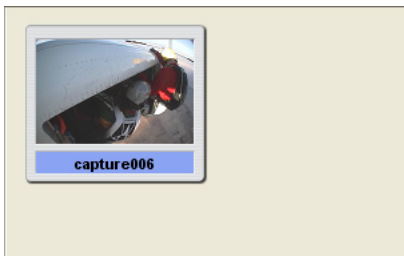
Chapter 3 : Using Let's EDIT 2

- Let's EDIT 2 will process the filtered clip and save the result with the name you specified.

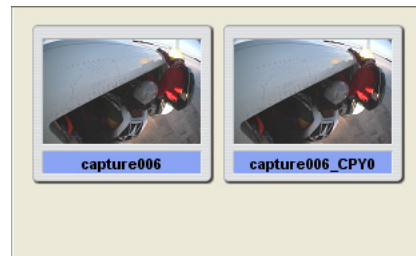


Clip rendering progress dialog

- The new clip will be added to the bin, and the clip you rendered on the timeline will be replaced by the new clip.



Bin before filter rendering



Bin after filter rendering



Timeline before filter rendering

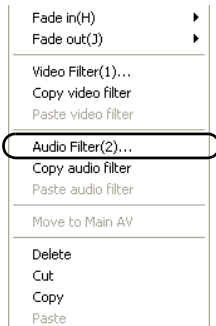


Timeline after filter rendering

Unlike rendered transitions, rendered video clips are real video clip files. They can be trimmed and further modified without the filtering being affected since the filter is already part of the video data.

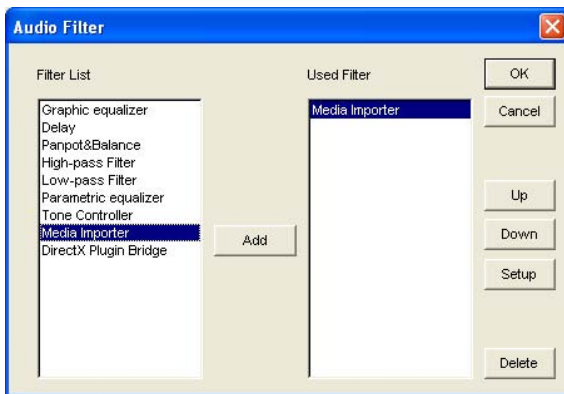
Adding audio filters

To apply an audio filter to a clip, right-click on the clip and choose **Audio Filter**.



Right-click on the clip and choose Audio Filter

The audio filter dialog will appear. The available audio filters appear on the left.



The Audio Filter dialog

Double-click on a filter name, or select it and click **Add** to add it to the list of used filters on the right.

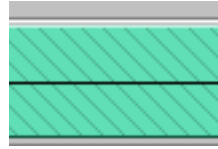
To remove a filter from the current clip, select it and click **Delete**.

To access the settings for a particular filter, double-click it, or select it and click the **Setup** button. The filter settings will appear on screen. Please refer to Chapter 5 for details on each of the filters.

Audio filters are applied in the order they appear in the list - to change the order that filters are applied, select a filter from the list of used filters and click the **Up** and **Down** buttons to reposition it in the list. For example, if you apply Graphic equalizer then High-pass filter, some of the graphic EQ's effects may be cancelled. However, if you apply High-pass filter then Graphic equalizer, the graphic EQ's full settings would take effect.

Chapter 3 : Using Let's EDIT 2

When a clip has an audio filter applied to it, diagonal lines running from bottom right to upper left appear on the clip in the timeline.



Clip with audio filter applied

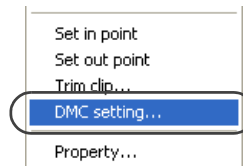
Copying audio filters from clip to clip

To copy the audio filters on one clip to another clip, right-click on the clip with the filters you want to copy and choose **Copy audio filter** then right-click on the clip you want to copy the filters to and choose **Paste audio filter**.

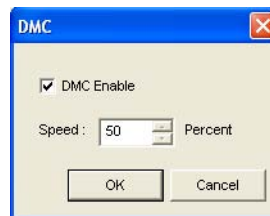
You cannot render filters on audio clips.

DMC setting

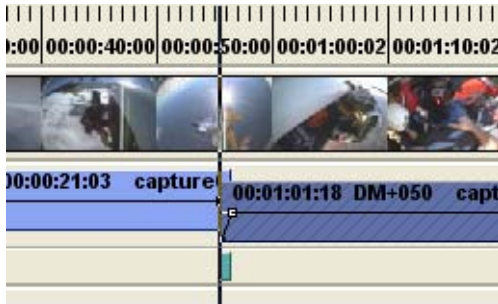
Click the right mouse button over the Main AV track, then select **DMC setting** from the pop-up menu. The DMC setting dialog appears.



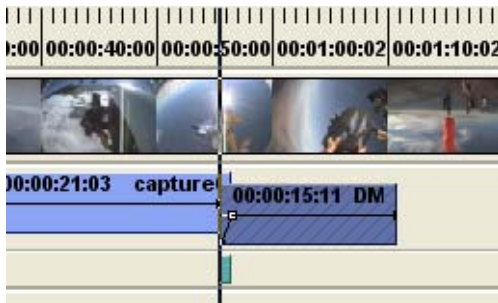
To turn on speed control, check **DMC Enable**, then specify the speed in the DMC dialog (default value is 100%).



For example, if you select a speed of 50%, the playback speed of the video clip will be reduced to one half the speed of the original, and the duration of the video clip will be twice as long.



As another example, if the speed of a clip is set to less than 100%, it will produce a slow motion effect. If the value is set to 200%, playback will be twice as fast as the original. If the speed is set to 150%, playback will be two thirds shorter.



Note that changing the playback speed of a video clip will have the same effect on the audio contained in the clip.

You can also select **DMC setting** from the pop-up menu when you click the right mouse button over the Extra Audio track area. The audio playback speed will be changed as well as the video speed when **Enable DMC setting** is checked and the speed is entered.

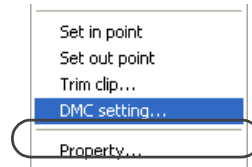
* Even after setting the speed, the playback speed of all clips will return to the default setting of 100% if **Enable DMC setting** is unchecked.

Changing speed and duration of an AV clip

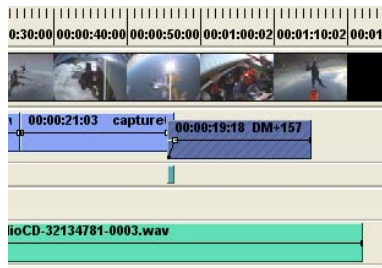
There are two different ways to change the speed and duration of an AV clip.

To change speed setting automatically

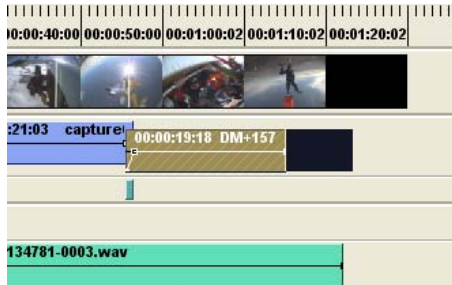
Right-click on the AV clip, then select **DMC setting** from the pop-up menu.



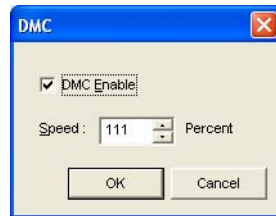
After setting the playback speed to be slower or faster, the length of the clip will be changed in inverse proportion to the speed percentage.



If the new duration is shorter or longer than required, you can adjust the length of the clip manually. Position the cursor on the edge of the AV clip until it changes to left and right arrows, then drag the AV clip line to either increase or decrease the length.

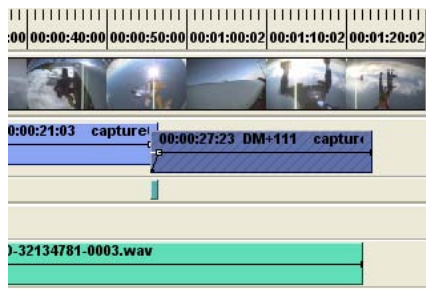


Even without changing the DMC settings, the playback speed will be adjusted automatically according to the new playback duration.



To cut an AV clip without changing speed

Right-click on the AV clip, select **Sparate**. The clip will be separated preserving the DMC setting.



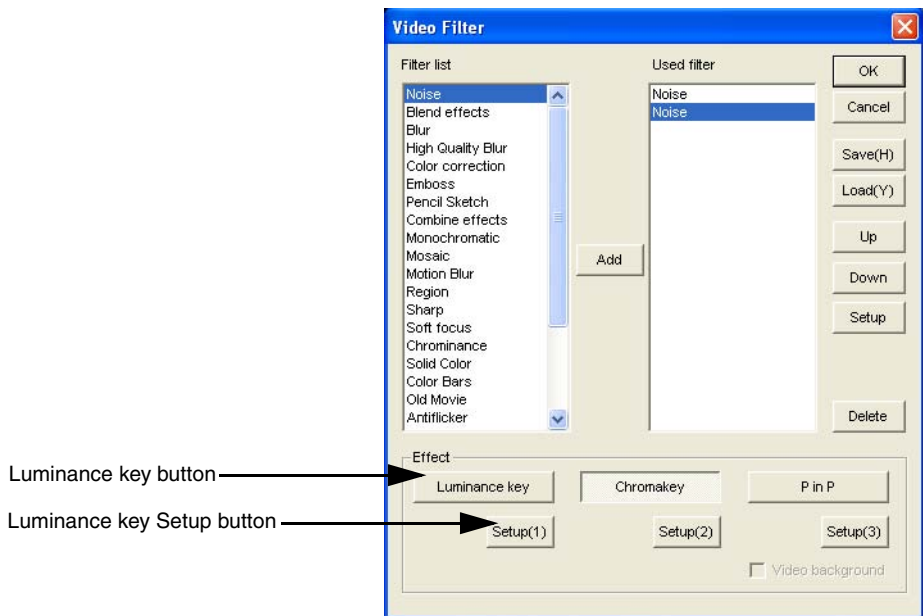
Adding Luminance key

Clips on the Insert AV track may be luminance keyed. Luminance keying, also known as “luma keying” is a technique used to superimpose part of a video above another video.

Luminance keying uses the brightness of the video to determine whether it appears or not. For example, if you have a dark shape on a light background, you can luma key out the dark portion, leaving a light background with a “hole” that shows video through it, or you can luma key out the light portion, leaving video around a black “hole.”

Enabling and disabling Luminance key

Luminance key is available for clips on the Insert AV track only. To enable Luminance Key for a clip, right click on it, choose **Video filter**, then click on the **Luminance key** button at the bottom of the Video Filter dialog.



Luminance key in the Video Filter dialog

The Luminance key button appears pushed in when it is enabled. To disable Luminance key, click on the Luminance key button again.

Luminance key setup

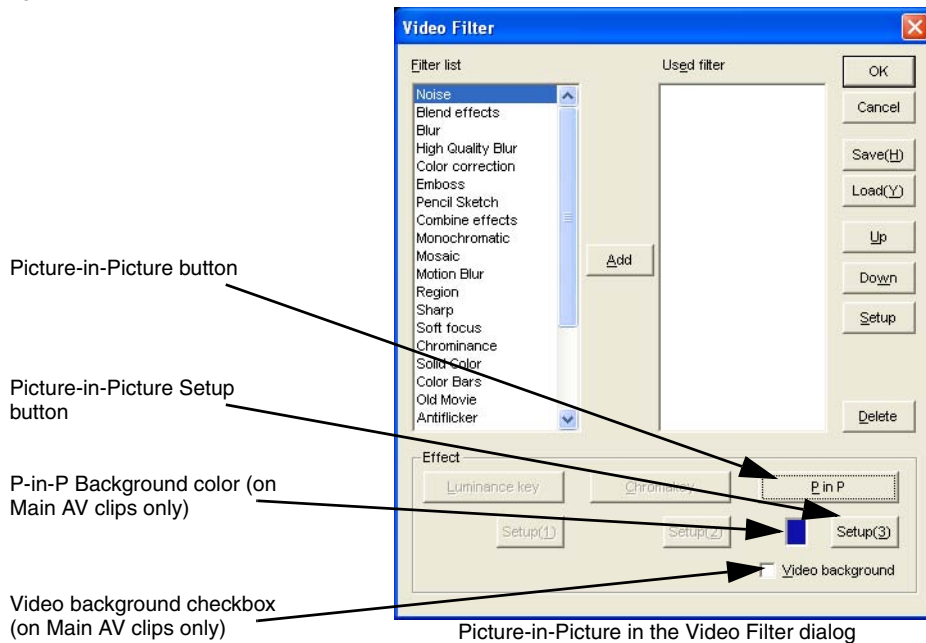
Click the **Setup** button below the Luminance key button to access the Luminance key setup. Refer to the Video filters chapter for a detailed description of the Luminance key settings.

Adding Picture-in-Picture

Picture-in-Picture (P-in-P) will place one frame of video within another, both playing simultaneously.

Enabling and disabling Picture-in-Picture

Picture-in-Picture is available for clips on both the Main AV and Insert AV lines. To enable Picture-in-Picture for a clip, right click on it, choose **Video filter**, then click on the **P-in-P** button at the bottom of the Video Filter dialog.



The P-in-P button appears pushed in when it is enabled. To disable P-in-P, click on the P-in-P button again.

Picture-in-Picture setup

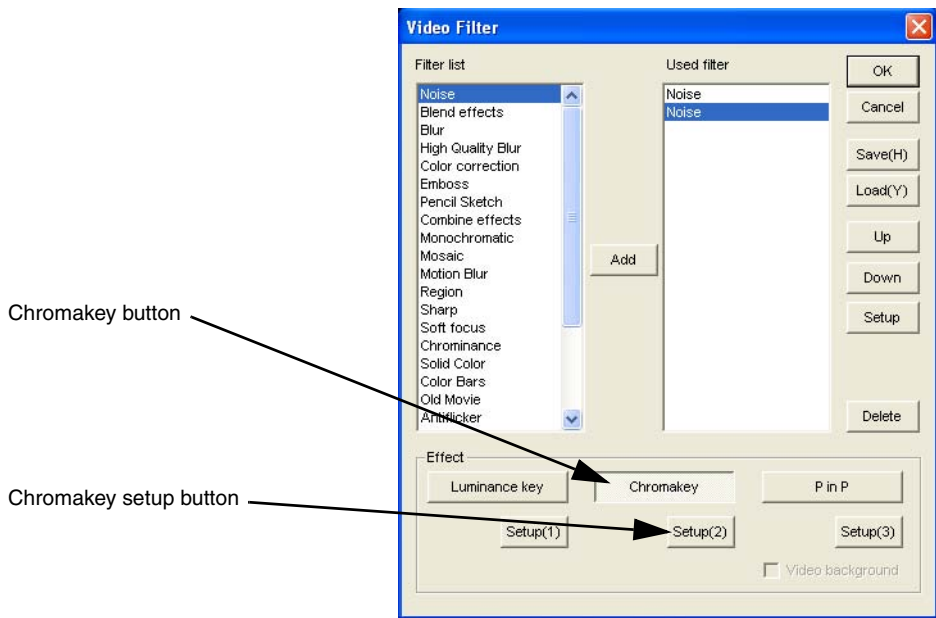
Click the **Setup** button below the P-in-P button to access the P-in-P setup. Refer to the Video filters chapter for a detailed description of the P-in-P settings.

Adding Chromakey

Chromakey allows you to superimpose one video image over another. The Auto Fit feature automatically selects a key color, and Auto Fit tracking will make the key follow slight color changes through the video.

Enabling and disabling Chromakey

Chromakey is available for clips on the Insert AV track only. To enable Chromakey for a clip, right click on it, choose **Video filter**, then click on the **Chromakey** button at the bottom of the Video Filter dialog.



Chromakey in the Video Filter dialog

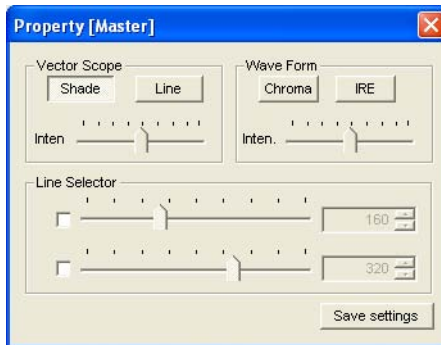
Chromakey setup

Click the **Setup** button below the Chromakey button to access the Chromakey setup. Refer to the Video filters chapter for a detailed description of the Chromakey settings.

Displaying the Vector scope and Waveform monitor

Displaying the Vector Scope

To display the vector scope, check **Show vector scope** in the View menu. Right-clicking on the **Vector Scope** will display the Properties for the waveform and vector scope displays.



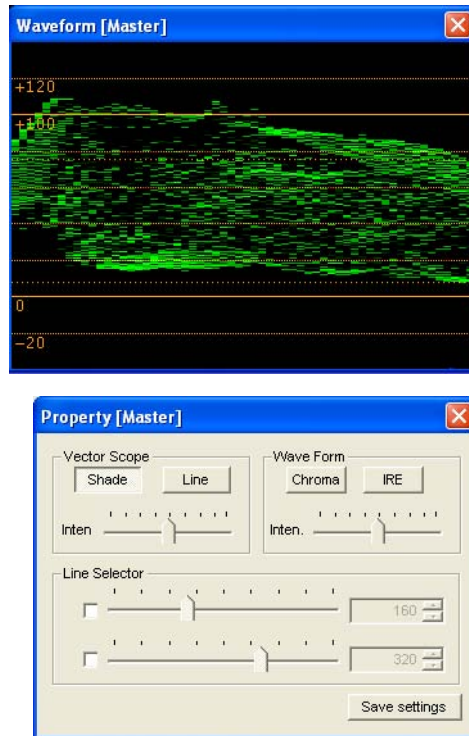
Shade will display the color composition using light and shading. The brighter a color is on the vector scope, the more that color appears in the video.

Line will display the color composition using lines.

Intensity adjusts the brightness of the vector scope. The further right the slider is, the brighter the vector scope is displayed.

Displaying the Waveform monitor

To display the wave form monitor, check **Show wave form** in the View menu. Right-clicking on the **Waveform** will display the Properties for the waveform and vector scope displays.



When **Chroma** is selected, only the chroma component is displayed in the wave form display and the luminance component is ignored.

When **IRE** is selected, only the luminance component is displayed in the wave form display and the chrominance component is ignored.

Intensity adjusts the brightness of the waveform display. The further right the slider is, the brighter the wave form is displayed.

Displaying timeline timecode on the video

You can display the timeline timecode on the video output by selecting **Show timecode on video** in the View menu.

The timeline timecode is displayed over the video on both the analog and DV output.

Be careful when creating files from the timeline or marked areas of the timeline, as the timecode will be displayed in the output file.

Timecode display will not affect the performance of transition rendering or filter rendering.

Outputting your Production to Tape

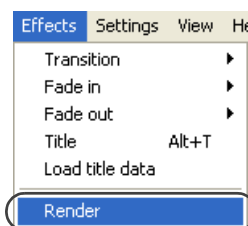
The final step in editing your video is to output your completed production back to tape.

Sync Record

The following steps will output your timeline to a DV camera or deck.

1. Verify that the timeline can be played back in realtime. If portions of the timeline cannot be played back in realtime, choose **Render** from the **Effects** menu to render transitions.

Choose Render from the Effects menu



2. Insert a blank tape into your DV device. Make sure it is not write-protected.
3. Click the **SyncRecord** button on the Control Toolbar.



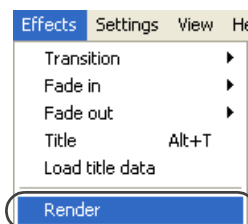
Let's EDIT 2 will record the timeline to the tape starting at the current tape position.

Manual Record

The following steps will output your timeline to a DV or Analog camera or deck.

1. Connect your camera or deck's input to your system's output. See your Installation guide for more details.
2. Verify that the timeline can be played back in realtime. If portions of the timeline cannot be played back in realtime, choose **Render** from the **Effects** menu to render transitions.

Choose Render from the Effects menu



3. If you don't have a segment of black at the beginning and end of your timeline, it would be advisable to add 5-10 second black color clips or color bars there.
4. If you don't want to record multiple copies of the timeline, make sure **Repeat playback** is not checked in the Settings menu.
5. Insert a blank tape into your analog device. Make sure it is not write-protected.
6. Put your camera or deck in Record Pause mode using its controls.
7. Move to the beginning of the timeline by using the mouse or pressing **Control-Home**.
8. Press the **Spacebar** to start playback of the timeline and immediately un-pause your camera or deck to start recording.
9. At the end of the timeline, stop your camera or deck.

Creating DVD-Video disk

You can create a DVD-Video disc from the timeline you have edited.

Follow the steps below to create a DVD-Video from your timeline.

1. Click the **Burn DVD** button.



2. **DVD Burning Settings** dialog appears. Choose **Auto Allocation** to create a DVD.

DVD Image Settings

Auto Allocation will create a DVD image in the temporally folder before creating a DVD-Video. The DVD image file will be deleted once the DVD-Video is done.

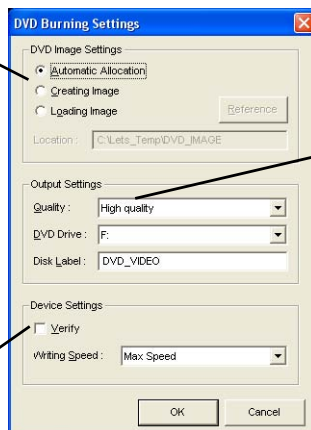
Creating Image will create a DVD image in the specified folder before creating a DVD-Video. The DVD image file will not be deleted even when the DVD-Video is done. The DVD image file can be used when you create a DVD later. Use this option when you wish to create multiple DVD-Video disks from your timeline.

Loading Image will create a DVD-Video disk from a DVD image file stored in your PC.

Device Settings

Verify: Check this option if you want to check whether the DVD-Video is properly created.

Writing Speed: Specify the speed to write DVD. Select a lower speed if writing errors occur.



Output Settings

Quality: The higher video quality you set, the more time it takes to encode.

DVD Drive: Specify the DVD-Drive to use.

Disk Label: Enter a label name for a DVD-Video disk.



Tips

If you have set chapters on your timeline, you can create a DVD-Video with the index chapters. Note that the difference up to 1 second may occur.

3. Click the OK button to start creating a DVD-Video disk.

Exporting the timeline or a segment of the timeline

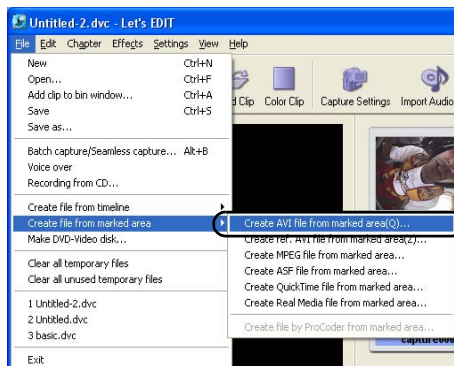
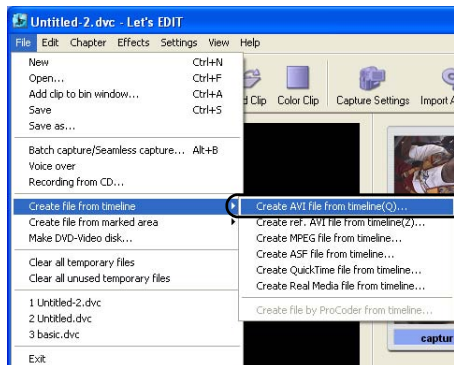
There may be instances when you need to save the timeline or a segment of it as a file. For example, you may want to combine two projects together, use the edited video in another program, or post your production on the web.

There are six options for creating a file from the timeline or segment of the timeline. You can create an AVI 2.0 file, a reference AVI file, a MPEG file, a Windows Media Format (WMV) file, QuickTime file, or a Real Media file. Which option you use largely depends on what you plan to do with the outputted file.

Exporting an AVI file

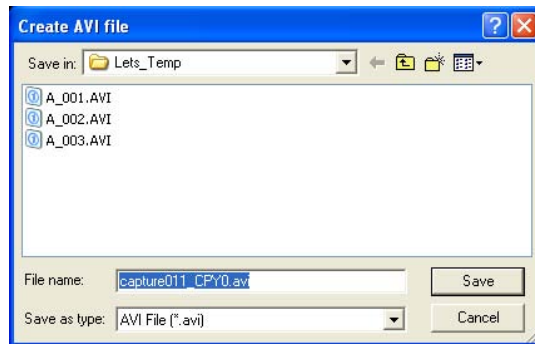
Create AVI file from timeline or **marked area** will create a new AVI file that contains all the audio and video data from the timeline or marked area. This AVI 2.0 file can be moved to another machine.

To create a AVI from the timeline, choose **Create AVI file from timeline** or **Create AVI file from marked area** in the File menu.



Chapter 3 : Using Let's EDIT 2

The Create AVI file dialog will appear.

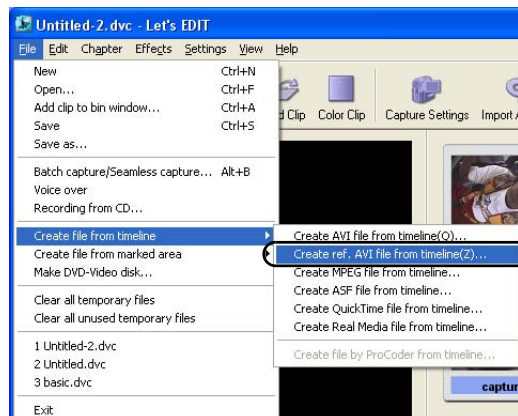


Give the file a name and click the **Save** button.

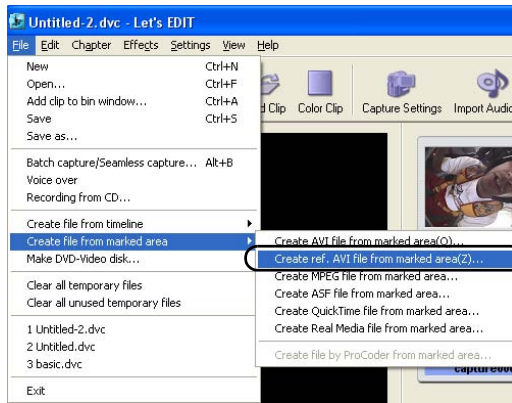
Create ref. AVI file from timeline will create a reference AVI file that contains pointers to the files that contain the audio and video data from the timeline. Any unchanged clips in the timeline will simply be “pointed to” by the AVI, and portions of the timeline that have changed will be rendered into the AVI and its data file(s).

This AVI file relies on the clip files as well as data it renders. It cannot be moved to another machine without duplicating the same source clips, drive and directory structure on the other machine. However, reference AVI file is useful when your AV file becomes too big. If you have specified multiple drives for the Temporary Drives in Default edit settings from the Settings menu, the data files for a reference file can be stored in multiple drives, once the primary drive is full. Choose Reference AVI in case the file becomes too big when captured in AVI2 file.

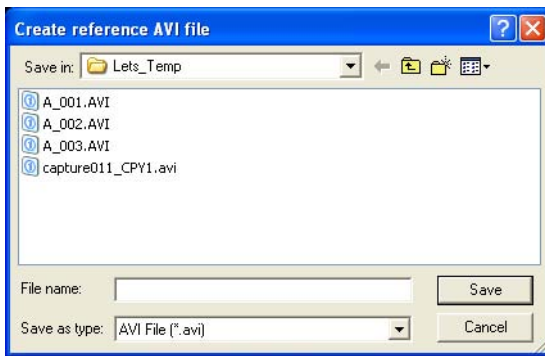
To create a reference AVI from the timeline or segment of the timeline, choose **Create ref. AVI file from timeline** or **Create ref. AVI from marked area** in the File menu.



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The Create reference AVI file dialog will appear.

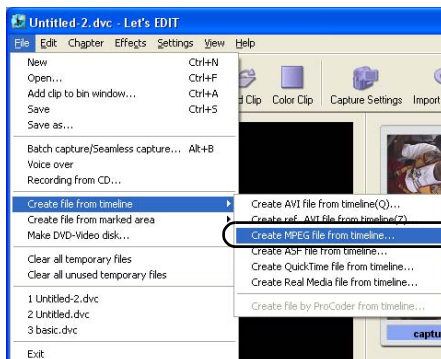


Give the file a name and click the **Save** button.

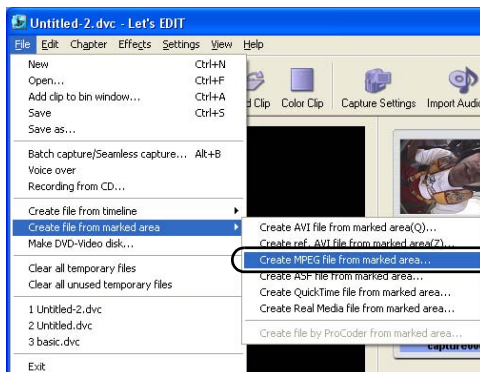
Chapter 3 : Using Let's EDIT 2

Exporting an MPEG file

Choose **Create MPEG file from Timeline** to create an MPEG file from the entire timeline, or **Create MPEG file from marked area** to create an MPEG file from the marked area of the timeline.



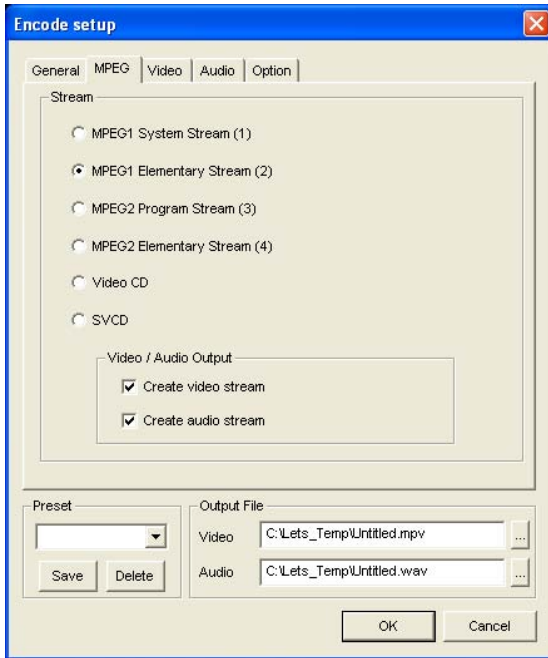
Create MPEG file from timeline



Create MPEG file from marked area

Encoding Settings

The MPEG Stream Type tab allows you to choose between various forms of MPEG1 and MPEG2. Options for the two forms of MPEG vary.



MPEG1 System Stream generates a multiplexed MPEG-1 file with both audio and video in the same file.

MPEG1 Elementary Stream generates separate MPEG-1 video and/or audio streams. Select whether to generate audio, video, or both streams (2 files) by checking or un-checking the Create video stream and Create audio stream boxes. Elementary streams are more often used by DVD-authoring software.

MPEG2 Program Stream generates a multiplexed MPEG-2 file with both audio and video in the same file.

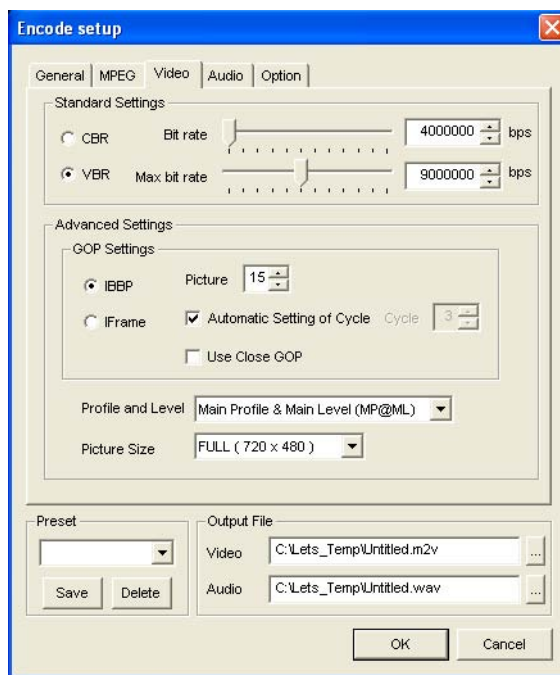
MPEG2 Elementary Stream generates separate MPEG-2 video and/or audio streams. Select whether to generate audio, video, or both streams (2 files) by checking or un-checking the Create video stream and Create audio stream boxes. Elementary streams are most often used by DVD-authoring software.

Video CD generates a multiplexed MPEG-1 file with both audio and video in the same file. Use this setting when authoring Video CDs, as

this will set the appropriate encoding parameters for White Book Video CD. Once you have your encoded file, take it to your VideoCD authoring software.

SVCD generates separate MPEG-2 video and MPEG1 or MPEG2 audio streams, Normally one SVCD disc can contain 35 - 60 minutes of video on 74/80 min CDs. Once you have your encoded file, take it to your SVCD authoring software.

The **Video** tab allows you to specify video encoding parameters.



CBR and **VBR** determine the bitrate variance.

CBR assigns a bit rate to a constant value regardless of the complexity of your video. This results in constant bit rate (size) but variable quality. For example, a newsman would not have a lot happening in the video, only lips and head moving. This means that the bit rate can be lowered and still maintain quality. However, if the video gets more complex then the quality decreases.

Set the CBR bit rate in the Bit rate box.

VBR determines the bit rate based on the complexity of the video. This results in variable bit rate (size) but constant quality.

The MPEG encoder automatically assigns bits to the video based on complexity.

In the newsman example the activity is low so the encoder will reduce the bit rate accordingly. In a more complex video, i.e. water ripples throughout the screen, the encoder will adjust up and down as required to maintain quality. Using VBR may increase the bit rate significantly to maintain quality.

Set the base bit rate in the Bit rate box, and set the maximum (peak) bit rate in the Max box.

Export as MPEG performs a single-pass VBR encoding.

Bit rate control allows you to set the quality of the encoding. The video bit rate settings depend on the MPEG type you are capturing.

With MPEG1 the bit rate is limited to 1.5Mb/s.

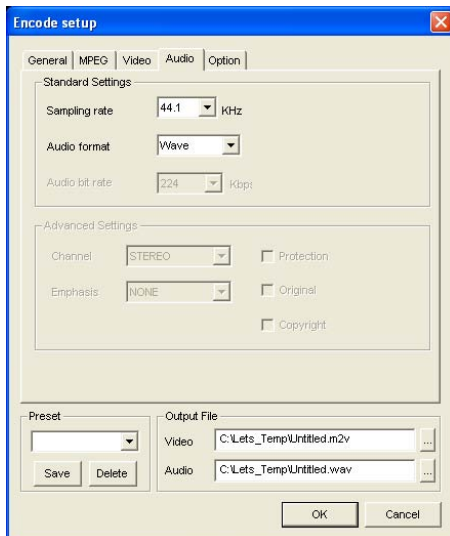
With MPEG-2 you can adjust the bit rate up to 15 Mb/s.

DVD home video is approximately 4Mb/s to 8Mb/s.

GOP settings is the frame arrangement in an MPEG stream. The GOP consists of a variable number of I, B and P frames. If you use IBBP you will receive the best quality at a low data rate. If you use I-frame only you will receive high quality but at a higher data rate. When you want to minimize bandwidth and maintain quality use IBBP as the GOP. I-frame only encoding is used only in special cases.

Use Closed GOP creates GOPs which do not reference outside of themselves. This is useful in cases where GOPs may occur individually or intermittently and not as a part of a continuous stream.

The **Audio** tab allows you to specify the audio encoding type. You can encode both raw PCM WAVE, and MPEG1 Layer II format.



Sampling rate determines the fidelity of the output audio. The higher the sampling rate, the wider the range of frequencies reproduced.

Audio format determines the audio encoding format. When encoding elementary streams, the **WAVE** selection will generate a stereo PCM uncompressed .WAV file corresponding to the video. The **Layer2** selection will generate MPEG Layer II audio.

Audio bit rate (not available with PCM WAVE) determines the number of bits allocated to audio. The higher the bit rate, the better the audio reproduction will be, but the more space the audio will require.

Channels specifies the mode of operation when encoding audio. The different modes all maintain quality but in the Stereo and Joint modes, stereo calculations are made to decrease bandwidth by using similarities between the two stereo channels.

Dual creates two independent mono channels similar to traditional stereo recording.

Mono creates a single monophonic channel

Stereo creates two stereo channels which share data reducing the amount of information needed to maintain high quality.

Joint creates two stereo channels which correlate to each other to take advantage of common sounds and tones. This is the most efficient way of maintaining quality and decreasing bandwidth.

Emphasis specifies whether or not to boost the high frequencies of sound to reduce noise. The playback device should detect whether the sound was encoded with emphasis and compensate as necessary.

None specifies that no emphasis should be added. Audio will be encoded "as-is."

50/15 µs specifies a 50/15 µs emphasis curve.

CCITT J17 specifies a CCITT J.17 emphasis curve.

To output a file, click OK.

MPEG file naming follows this convention:

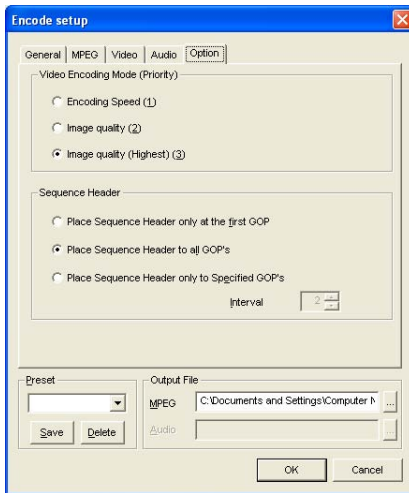
- .mpa**MPEG-1 audio elementary stream
- .mpv**MPEG-1 video elementary stream
- .mpg**MPEG-1 multiplex system stream
- .m2a**MPEG-2 audio elementary stream

.m2vMPEG-2 video elementary stream
.m2pMPEG-2 multiplex program stream

The **MPEG** filename box is used for multiplexed streams (VideoCD, MPEG-1 System stream, MPEG-2 Program stream), while the **Video** and **Audio** filename boxes are used for Elementary streams.

MPEG-1 files can be played in Windows Media Player, MPEG-2 files require extra MPEG-2 decoding hardware or software. You can play (but not edit) MPEG-1 and MPEG-2 files in Let's EDIT 2 by opening them with **Add file to Bin window**.

Option tab allows you to change the settings for the Video Encoding mode and Sequence header.



Video Encoding Mode

Encoding Speed will prioritize the speed of the encoding.

Image quality is the standard setting.

Image quality(Highest) will prioritize the quality of the image.

Sequence Header

Place Sequence Header only at the first GOP

Check this option to place Sequence Header only at the first GOP.

Place Sequence Header to all GOP's

Check this option to place Sequence Header to all GOP's

Chapter 3 : Using Let's EDIT 2

Place Sequence Header only to specified GOP's

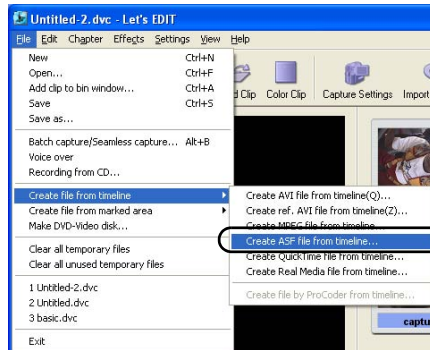
Check this option to place Sequence Header only to specified GOP's.

The interval can be specified with the box below.

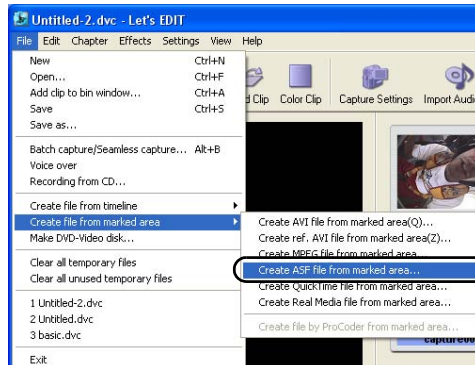
Export to ASF

The software installation installs the necessary Windows Media components (compliant to Windows Media 8.0) so you can create Microsoft Windows Media streaming files.

Select **Create ASF from timeline** to create an ASF (WMV) file from the entire timeline, or **Create ASF from marked area** to create an ASF (WMV) file from the marked area.

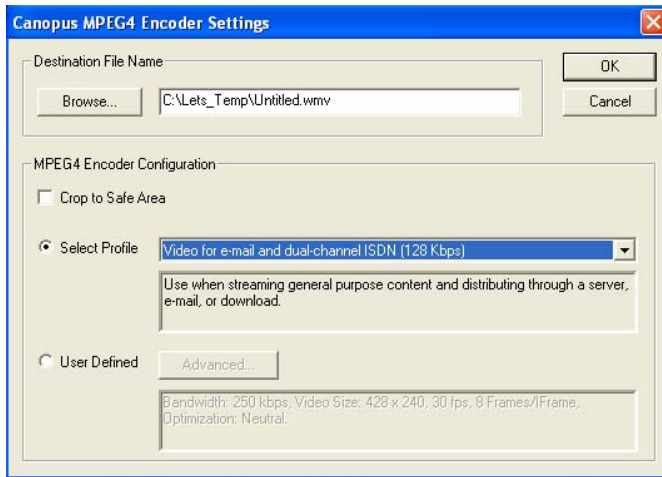


Create ASF file from timeline



Create ASF file from marked area

Encoding Settings



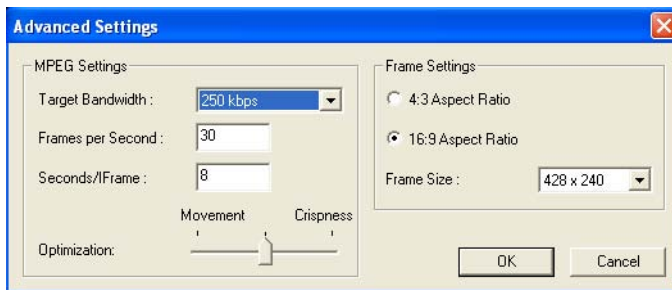
Windows MediaExport Encoder Settings

Click the **Browse** button to set the destination filename.

Check the **Crop to Safe Area** box to crop the video to safe area (adds black border on all sides).

You can choose one of the presets, or specify your own settings by selecting **User Defined** and clicking the **Advanced** button.

Advanced Settings



Export Advanced Settings

Target Bandwidth specifies the necessary bandwidth to play the resulting stream.

Frames per Second specifies the frames per second in the encoded video.

The **Optimization** slider allows you to change the optimization between Movement and Crispness. If there is a high degree of movement, it may be better to set for Movement, while if there is little or no movement, it may be better to set for Crispness. In general, leaving it in the middle is best.

Set the aspect ratio with the **Aspect Ratio** radio buttons. You should choose the aspect ratio used by your project.

Set the frame size from the **Frame Size** dropdown.

Click **OK** to begin export.

ASF files are playable in Windows Media Player - they cannot be loaded into Let's EDIT 2.

Export to QuickTime

Select **Create QuickTime from timeline** to create a QuickTime file from the entire timeline, or **Create QuickTime from marked area** to create an QuickTime file from the marked area.



QuickTime Export settings

Check **Video track enable** to export the video element. Uncheck it if you do not want to export video element.

Check **Fixed aspect** to constrain the aspect ratio when changing the size.

Check **Square pixel** to select square-pixel resolutions for computer display.

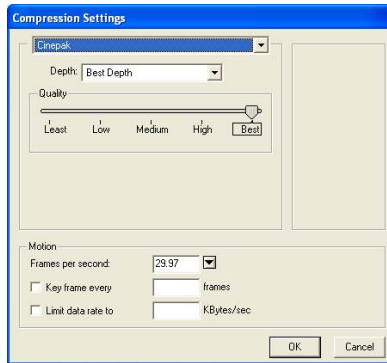
Change the size of the output video by using the **Size** dropdowns.

Check **Sound track enable** to export the audio element. Uncheck it if you do not want to export audio element.

Click **Video settings** to open the video settings dialog.

Click **Audio settings** to open the audio settings dialog.

Video settings



QuickTime export Video settings

The available options in the Video settings depend on the selected CODEC.

Select the compression CODEC in the first box.

Select the color depth in the second box.

The **Quality** slider adjusts the quality level.

Frames per second determines the output framerate.

Check **Key frame every** _ **frames** to set key frame parameters. Enter the number of frames in the box.

Check **Limit data rate to** _ **K/Second** to limit the datarate for the encoded file. Enter the datarate in the box.

Audio settings



QuickTime export Video settings

Audio settings depend on the compressor used.

Choose the audio compressor from the **Compressor** box.

Rate determines the sampling rate.

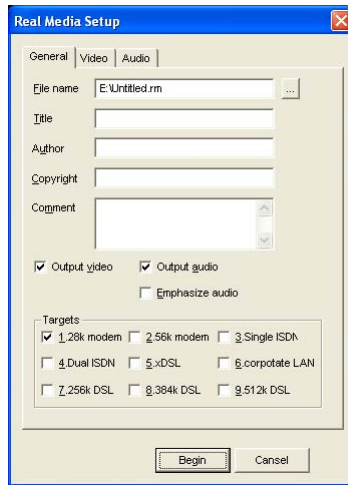
Size determines the number of bits used for audio.

Use determines whether the audio will be Mono or Stereo.

The **Options** button will bring up options, if available.

Export to Real Media

Select **Create Real Media from timeline** to create a Real Media file from the entire timeline, or **Create Real Media from marked area** to create an Real Media file from the marked area.



Real Media Export settings

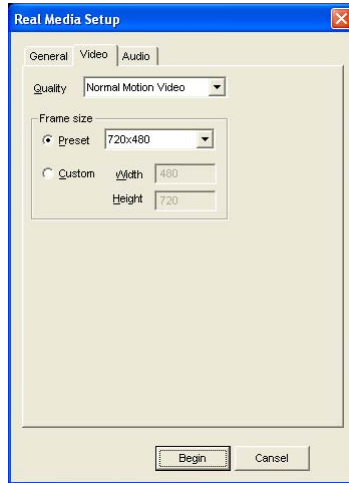
Check **Output video** to export the video. Uncheck it if you do not want to export video.

Check **Output audio** to export the audio. Uncheck it if you do not want to export audio.

Check **Emphasize audio** to export a file which gives priority to audio rather than video movie.

Target information will help other users in their search for your clip on the web.

Video settings



Real Media export Video settings

Quality optimizes the encoding for the desired result.

Normal Motion Video optimizes for normal video.

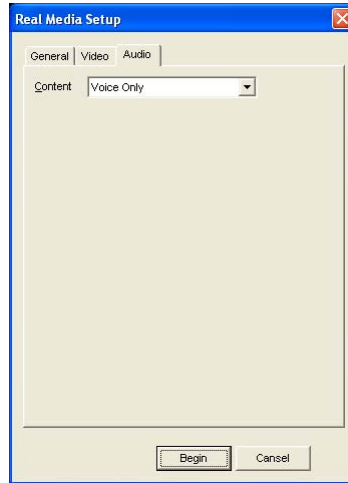
Smoothest Motion Video optimizes to provide the smoothest motion.

Sharpest Image Video optimizes to provide the sharpest image.

Slide Show optimizes for slideshow presentation.

Frame size specifies the size of the output video. Choose one from the **Preset** drop-down list, or specify it in the **Custom** field.

Audio settings



Real Media export Video settings

Select the type of audio to encode for.

Voice Only - Select this option if the source mostly contains voice.

Voice with Background Music - Select this option if the source contains voice and background music.

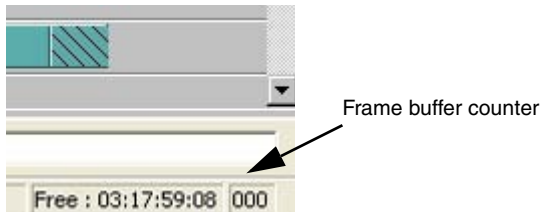
Music - Select this option if the source contains music or other non-voice sounds.

Stereo Music - Select this option if the source contains stereo music.

Playback buffer and non-realtime effects

About the playback buffer

On the bottom right corner of the Let's EDIT 2 window, there is a counter which shows the number of buffered frames. The playback buffer allows the system to play back in realtime through short areas that have more effects than could normally be handled.



As the duration of the “overloaded” area increases, the playback buffer gets depleted. When this counter reaches 0, the system is no longer able to process in realtime and frames get dropped (or playback stops).

The playback buffer gets replenished as the system goes through areas that it has enough CPU power to process. You can also start playback with the playback buffer pre-filled by using **Shift-Space** to play your timeline.

The default size of the playback buffer is 1 second. However, if you have a lot of memory, you can increase the size of the playback buffer under Settings – Properties.

Non-realtime effects

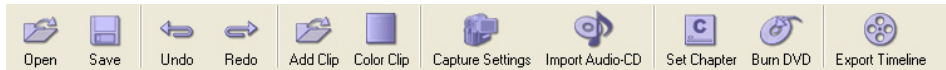
Some non-realtime effects can be played back in realtime, depending on the situation.

Non-realtime effects playback uses the playback buffer described above to do the processing. Thus, there must be a sufficient amount of time for the effect to render on-the-fly, enough time between effects for the playback buffer to “recharge,” and effects cannot be too long in duration.

Interface In-depth

Main Toolbar

The Main Toolbar contains buttons for many commonly used menu items.



The functions of the Main Toolbar buttons are as follows:

**Open**

Opens an existing project file.

**Save**

Saves the project file.

**Undo**

Undo the last action.

**Redo**

Redo the action that was undone.

**Add Clip**

Opens the Add clip to bin window dialog.

**Color Clip**

Opens the Color clip dialog to add a color clip to the Bin.

**Capture Settings**

Opens the Capture Setting dialog.

**Import Audio CD**

Opens the Capturing CD dialog.

**Set Chapter**

Opens the Chapter Setting dialog.

**Burn DVD**

Opens the DVD Burning Settings dialog.

**Export Timeline**

Creates AV files from the timeline.

Control Toolbar

The Main Toolbar contains buttons for deck control and timeline playback control.



The functions of the Control Toolbar buttons are as follows:

**CAM**

Enables Deck Controller.

**EDIT**

Enables Timeline Playback Controller.

**Preview window size**

Toggles the preview window between Full size and Custom size.

**Full screen preview**

Changes the preview to full screen mode.

**Timecode**

Enables/Disables the display of the time-code.

Deck Controller

**Play/Pause**

Starts/Pauses playback on the deck.

**Stop**

Stops the deck.

**Rewind**

Rewinds the tape, when the DV deck is stopped.
Goes into reverse-scan, when the DV deck is playing.

**Previous frame**

Moves the deck one frame back.

**Next frame**

Moves the deck one frame forward.

**Forward**

Fast-forwards the tape, when the DV deck is stopped.
Goes into forward-scan, when the DV deck is playing.



(Not used)

**Capture**

Starts capturing to the bin.

**SyncRecord**

Starts SyncRecord on the deck. SyncRecord will record the timeline to the deck automatically.

Timeline Playback Controller

**Play/Pause**

Starts/Pauses preview of the timeline.

**Stop**

Stops preview of the timeline.

**Previous editing point**

Jumps to the previous editing point.

**Previous frame**

Moves the timeline cursor one frame back.

**Next frame**

Moves the timeline cursor one frame forward.

**Next editing point**

Jumps to the next editing point.

**Repeat playback**

Enables/disables repeat playback.



(Not used)

**SyncRecord**

Starts SyncRecord on the deck. SyncRecord will record the timeline to the deck automatically.

Edit Toolbar

The Edit Toolbar contains buttons to edit clips on the timeline.



The functions of the Edit Toolbar buttons are as follows:



Set in

Sets the IN point for the clip at the current timeline cursor position.



Set out

Sets the OUT point for the clip at the current timeline cursor position.



Separate

Separates the clip at the timeline cursor position.



Delete

Removes the clip at the timeline cursor position.



Transition

Adds the default transition to the separation nearest to the timeline cursor.



Title

Opens the title GUI to add or edit a title at the timeline cursor position.



Video Filter

Opens the video filter dialog to add video clip(s) at the timeline cursor position.



Fade in

Adds a fade in (from black) to the separation nearest to the timeline cursor.



Fade out

Adds a fade out (to black) to the separation nearest to the timeline cursor.



Voice over

Starts voice over recording as an audio clip.

Marker Control Toolbar

The Marker Control Toolbar contains buttons to set marker points.



The functions of the Marker Control Toolbar buttons are as follows:



Set mark IN

Marks the current timeline cursor point as the IN point for the timeline.



Set mark OUT

Marks the current timeline cursor point as the OUT point for the timeline.



Jump to mark IN

Moves the timeline cursor to the marked timeline IN point.



Jump to mark OUT

Moves the timeline cursor to the marked timeline OUT point.



Play from IN to OUT

Plays the timeline from the marked in point to the marked out point.

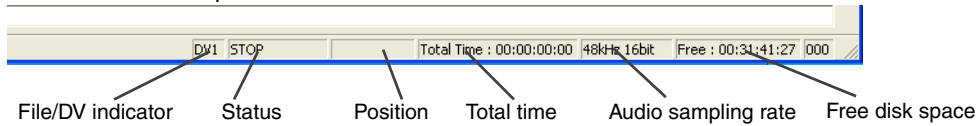
Shuttle Bar

The shuttle bar allows you to quickly move through the timeline. Drag the slider to move through the timeline.



Status Bar

The status bar lists pertinent information about the timeline.



File/DV indicator

Displays File if the position information is for the timeline or DV if the position information is for the deck.

Status

Displays the status of the deck or timeline.

Position

Displays the time position and frame position of the deck or timeline cursor.

Total time

Displays the total time length of the timeline in hours, minutes, seconds, frames and in number of frames.

Audio sampling rate

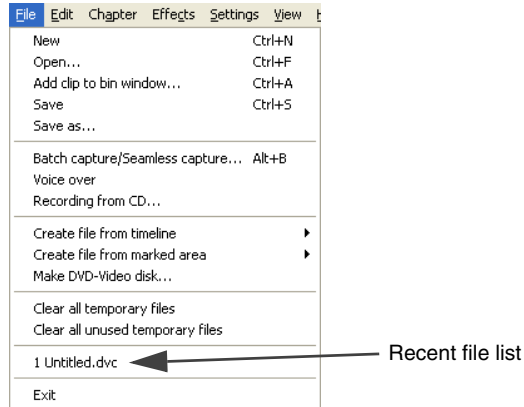
Displays the sampling rate of the timeline.

Free Disk Space

Displays the amount of free disk space on the temporary drives which are specified in the Temporary Drives tab in the Default edit settings in the Settings menu.

Menu options

File Menu



New

Clears the current bin and timeline and creates a new project.

Open

Opens an existing project file.

Add clip to bin window

Opens the Add clip to bin window dialog to load clips into the DV bin.

Save

Saves the project file.

Save as...

Saves the project file to a new file.

Batch capture/Seamless capture

Opens the Batch capture/Seamless capture dialog.

Voice over

Starts voice over recording.

Import Audio-CD

Records from an audio CD and creates WAV files.

Create file from timeline

Create AVI file from timeline

Creates a new AVI file from the timeline.

Create ref. AVI from timeline

Creates a reference AVI file from the timeline.

Create MPEG file from timeline

Creates a MPEG file from the timeline.

Create ASF file from timeline

Creates a Windows Media streaming file from the timeline.

Create QuickTime file from timeline

Creates a QuickTime file from the timeline.

Create Real Media file from timeline

Creates a Real Media file from the timeline.

Create file by ProCoder from timeline

Utilizes Canopus ProCoder Express to create an AV file from the timeline.

Create file from marked area

Create AVI file from marked area

Creates a new AVI file from the marked area.

Create ref. AVI file from marked area

Creates a reference AVI file from the marked area.

Create MPEG file from marked area

Creates a MPEG file from the marked area.

Create ASF file from marked area

Creates a Windows Media streaming file from the marked area.

Create QuickTime file from marked area

Creates a QuickTime file from the marked area.

Create Real Media file from marked area

Creates a Real Media file from the marked area.

Create file by ProCoder from marked area

Utilizes Canopus ProCoder Express to create an AV file from the marked area.

Clear all temporary files

Clears all the temporary files for this project.

Clear all unused temporary files

Clears any unused temporary files for this project (rendered transitions that were subsequently deleted, etc).

Recent file list

Provides quick opening of recent files.

Exit

Quits out of Let's EDIT 2.

Edit menu

Edit	Chapter	Effects	Settings	View	Help
Undo					Ctrl+Z
Redo					Ctrl+Y
Delete					Del
Cut					Ctrl+X
Copy					Ctrl+C
Paste					Ctrl+V
Paste to bin window					Ctrl+B
Separate					Ctrl+D
Save as still image(K)...					Alt+W
Paste transition(F)					Alt+S
Paste title(H)					Alt+D
Search					▶
Mark(Q)					▶
Set In Point					Ctrl+I
Set Out Point					Ctrl+O
Trim clip...					Ctrl+T
Add color clip to bin window(J)					Alt+A
Auto arrange clips					Ctrl+G
Auto arrange clips in reverse order					Ctrl+H
Add clips on MainAV to bin window					Ctrl+U
Move all clips on InsertAV to MainAV					
Clear bin window					Alt+Del
Clear Timeline					Ctrl+Del

Undo

Undo the last action performed.

Redo

Redo the undone action.

Delete

Deletes the selected clip from the timeline.

Cut

Cuts the selected clip from the timeline and puts it on the clipboard.

Copy

Copies the selected clip to the clipboard.

Paste

Pastes the clip on the clipboard to the timeline.

Paste to bin window

Pastes the clip on the clipboard to the DV Bin.

Separate

Separates the clip at the timeline cursor.

Save as still image

Opens the Save as still image dialog to save the image at the timeline cursor as a still image.

Paste transition

Pastes the transition on the clipboard to the timeline.

Paste title

Pastes the title on the clipboard to the timeline.

Search

Jump

Opens the Jump dialog to jump to a particular time or frame.

Jump to previous scene

Searches for and moves the timeline cursor to the previous scene (if any).

Jump to next scene

Searches for and moves the timeline cursor to the next scene (if any).

Jump to previous index

Moves the timeline cursor to the previous index point (if any).

Jump to next index

Moves the timeline cursor to the next index point (if any).

Mark

Set mark in

Sets the current timeline cursor position as the timeline in point.

Set mark out

Sets the current timeline cursor position as the timeline out point.

Jump to mark in

Searches for and moves the timeline cursor to the timeline in point.

Jump to mark out

Searches for and moves the timeline cursor to the timeline out point.

Play from in to out

Plays the timeline from the marked in point to the marked out point.

Clear mark in/out

Clears the marked timeline in and out points.

Render marked area

Renders the marked area

Set In Point

Sets the timeline cursor position as the In point for the current clip.

Set Out Point

Sets the timeline cursor position as the Out point for the current clip.

Trim clip...

Opens the Trim clip dialog to manually trim a clip by frame or timecode.

Add color clip to bin window

Opens the Color clip dialog to add a color clip to the bin window.

Auto arrange clips

Arranges the clips in the DV bin on to the Main AV track, before the clip at the timeline cursor.

Auto arrange clips in reverse order

Arranges the clips in the DV bin on to the Main AV track after the clip at the timeline cursor.

Add clips on Main AV to bin window

Adds the clips on the Main AV track to the DV bin.

Move all clips on Insert AV to Main AV

Moves all clips on the Insert AV track on to the Main AV track.

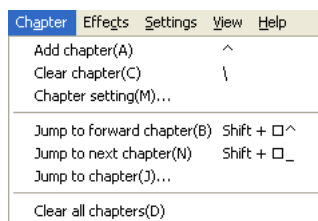
Clear bin window

Clears the DV bin of clips. The timeline will not be changed.

Clear Timeline

Clears the timeline. The DV bin will not be changed.

Chapter menu



Add chapter

Sets a chapter at the current timeline cursor position.

Clear chapter

Clears the chapter at the current timeline cursor position.

Chapter setting

Opens the Chapter Settings dialog to set chapters at Regular intervals and/or every Cut point.

Jump to forward chapter

Moves the timeline cursor to the forward chapter point.

Jump to next chapter

Moves the timeline cursor to the next chapter point.

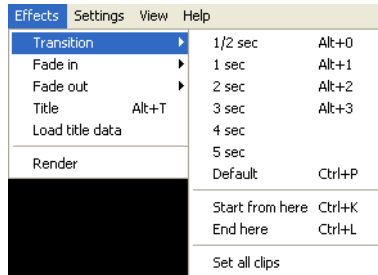
Jump to chapter

Opens the Jump to chapter dialog to moves the timeline cursor to chapter points. Choose a chapter and click the OK button to jump. Or double-click a chapter to jump to the chapter point without closing the dialog.

Clear all chapter

Clears all the chapters on the timeline.

Effects menu



Transition

1/2 sec

Adds a 1/2 second default transition.

1 sec

Adds a 1 second default transition.

2 sec

Adds a 2 second default transition.

3 sec

Adds a 3 second default transition.

4 sec

Adds a 4 second default transition.

5 sec

Adds a 5 second default transition.

Default

Adds a default transition with the default duration.

Start from here

Adds the default transition starting from the timeline cursor.

End here

Adds the default transition ending at this point.

Set all clips

Adds the default transition with default duration to all separation points that do not already have transitions.

Fade in

1/2 sec

Adds a 1/2 second fade in.

1 sec

Adds a 1 second fade in.

2 sec

Adds a 2 second fade in.

3 sec

Adds a 3 second fade in.

4 sec

Adds a 4 second fade in.

5 sec

Adds a 5 second fade in.

Default

Adds a fade in of the default duration.

Fade out

1/2 sec

Adds a 1/2 second fade out.

1 sec

Adds a 1 second fade out.

2 sec

Adds a 2 second fade out.

3 sec

Adds a 3 second fade out.

4 sec

Adds a 4 second fade out.

5 sec

Adds a 5 second fade out.

Default

Adds a fade out of the default duration.

Title

Opens the titling GUI to add titles.

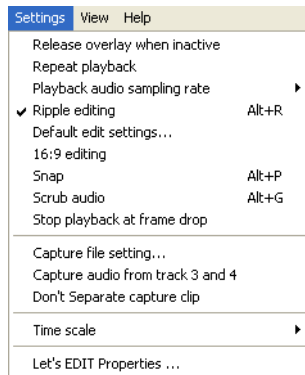
Load title data

Opens a dialog to load a title data file onto the timeline.

Render

Renders the transition or title.

Settings menu



Release overlay when inactive

When checked, overlay will be released (making the playback of the timeline stop) when Let's EDIT 2 window becomes inactive.

When unchecked, overlay will not be released. Playback will continue even when Let's EDIT 2 window becomes inactive.

Repeat playback

When checked, playback will repeat from the beginning of the timeline when it hits the end.

When unchecked, playback will stop at the end of the timeline.

Playback audio sampling rate

48 kHz 16bit

Specifies that the timeline should be played with 48 kHz 16-bit audio. Any audio that is not 48 kHz, 16-bit, will be upsampled as necessary. This is the best setting to use unless you are outputting 4-channel 32 kHz audio.

44.1 kHz 16bit

Specifies that the timeline should be played with 44.1 kHz 16-bit audio. Any audio that is not 44.1 kHz, 16-bit, will be upsampled or downsampled as necessary.

32 kHz 16bit

Specifies that the timeline should be played with 32 kHz 16-bit audio. Any audio that is not 32 kHz, 16-bit, will be upsampled or downsampled as necessary.

32 kHz 12bit

Specifies that the timeline should be played with 32 kHz 12-bit audio. Any audio that is not 32 kHz, 12-bit, will be downsampled as necessary.

Ripple editing

When checked, Insert AV clips, titles, and Ex Audio clips will move with the corresponding Main AV clip location when a Main AV clip is added or deleted from the Main AV track. Ripple editing keeps Insert AV clips, titles, and Ex Audio clips synced to the proper positions.

When unchecked, if a Main AV clip is added or removed only clips in the Main AV track will shift.

It is generally good to keep this option checked.

Default edit settings...

Opens the Default edit settings dialog to set or change edit defaults.

16:9 editing

Sets Let's EDIT 2 for 16:9 aspect ratio editing. Transitions and effects will be rendered so their aspect ratios are correct for 16:9 footage.

You cannot mix 4:3 and 16:9 footage in the same project.

Snap

When checked, the clip will snap to the nearest clip boundary or separation, when dragging it on the timeline.

When unchecked, the clip will not snap.

Scrub audio

When checked, the audio from the Main AV, Insert AV, Ex Audio tracks will be mixed and play while scrubbing.

When unchecked, the audio will be muted.

Stop playback at frame drop

When checked, playback stops if the system cannot process the playback of the timeline in realtime.

When unchecked, frames get dropped instead of stopping the playback.

Capture file setting

Opens the Capture Settings dialog to specify the file type to capture AV file in.

Capture audio from track 3 and 4

When checked, audio from channel 3 and 4 on the tape (4-channel 32 kHz 12-bit audio) will be captured to a separate WAV file simultaneously with the AV capture in Let's EDIT 2. The separate WAV file can be synced to the corresponding AV clip to get all four channels of audio.

When unchecked, audio from channel 3 and 4 will not be captured.

Don't Separate capture clip

When unchecked, Let's EDIT 2 will separately capture clips from the DV tape as detecting TC or date. When checked, you can capture a whole clip without separating.

Time scale

1 Frame

Sets the timeline scale to 1 frame.

10 Frames

Sets the timeline scale to 10 frames.

1 Second

Sets the timeline scale to 1 second.

2 Seconds

Sets the timeline scale to 2 seconds.

5 Seconds

Sets the timeline scale to 5 seconds.

10 Seconds

Sets the timeline scale to 10 seconds.

15 Seconds

Sets the timeline scale to 15 seconds.

30 Seconds

Sets the timeline scale to 30 seconds.

1 Minute

Sets the timeline scale to 1 minute.

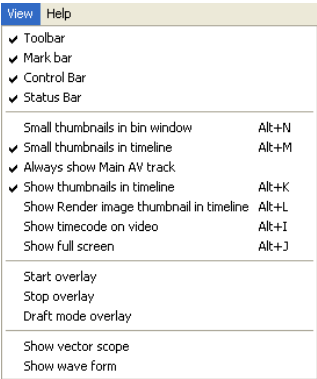
Fit Scale

Sets the timeline scale to whatever value is necessary for the entire timeline to be visible on the screen.

Let's EDIT Properties

Opens the System properties dialog for miscellaneous settings.

View Menu



Tool Bar

Toggles display of the Tool bar.

Mark bar

Toggles display of the Mark bar.

Control Bar

Toggles display of the Control bar.

Status Bar

Toggles display of the Status bar.

Small thumbnails in bin window

When checked, small thumbnails are used in the bin window.

When unchecked, large thumbnails are used in the bin window.

Small thumbnails in timeline

When checked, small thumbnails are used in the Film track.

When unchecked, large thumbnails are used in the Film track.

Always show Main AV track

When checked, the Main AV track will be “locked” on to the interface. When not all tracks are shown and the tracks are scrolled, Main AV will remain locked at the top.

When unchecked, the Main AV track will scroll with the remaining tracks if not all tracks are shown.

Show thumbnails in timeline

When checked, the Film track shows thumbnails of the video at varying intervals.

When unchecked, the Film track is hidden and no thumbnails are shown.

Show Render image thumbnail in timeline

When checked, timeline thumbnails are taken from the source clips with filters applied. This can significantly slow scrubbing and timeline navigation. When unchecked, the timeline thumbnails come from the source clips unfiltered.

Show timecode on video

When checked, the timeline timecode is displayed over the output video. When unchecked, no timeline timecode is displayed on the output video.

Show full screen

Changes the preview display overlay to full screen mode. In the full screen mode, left-click to play/stop, right-click to open the contextual menu. Press the ESC key to quit the full screen mode.

Start overlay

Starts the preview display overlay.

Stop overlay

Stops the preview display overlay.

Draft mode overlay

When checked, the preview overlay will be displayed in draft mode, reducing the overload to the system.

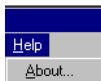
Show vector scope

Displays the timeline vector scope monitor.

Show wave form

Displays the timeline wave form monitor.

Help menu

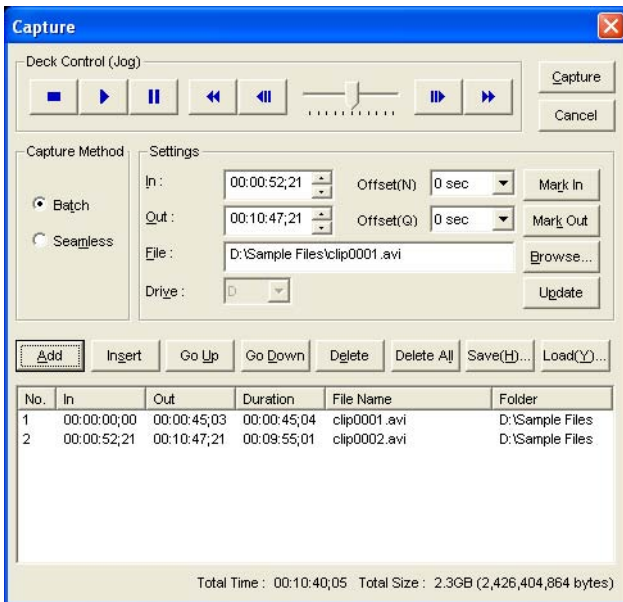


About...

Opens the About dialog to display software version information.

Dialogs

Batch/Seamless capture - Batch mode



Capture Method

Batch

Enables Batch capture mode.

Seamless

Enables Seamless capture mode. This option is unavailable when you capture clips in MPEG format.

Settings

In

Timecode at which the clip should begin.

Out

Timecode at which the clip should end.

File

Filename for the captured clip.

Mark In button

Sets the current tape position as the In point for the clip.

Mark Out button

Sets the current tape position as the Out point of the clip.

Browse button

Opens a window to set the clip's filename.

Update button

Updates the selected list entry with the specified In point, Out point, and filename.

Add button

Adds the current settings as a new clip at the end of the capture list.

Insert button

Adds the current settings as a new clip before the selected clip in the capture list (or to the end of the capture list, if there is no selection).

Go Up button

Moves the selected clip one position upward in the capture list.

Go Down button

Moves the selected clip one position downward in the capture list.

Delete button

Deletes the selected clip from the capture list.

Delete All button

Deletes all clips from the capture list.

Save button

Saves the capture list.

Load button

Loads a capture list.

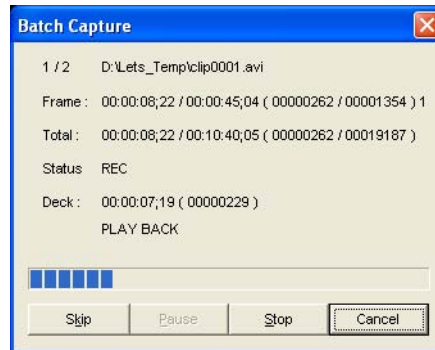
Capture button

Starts the batch capture operation.

Cancel button

Clears the capture list and closes the Batch capture/Seamless capture window.

Batch Capture progress



/ # xxxxx

Displays the current clip being captured, the total number of clips to be captured, and the current clip's filename. Ex. **1 / 2 D:\capture1.avi** specifies that clip 1 of 2 clips is currently being captured and it is writing to D:\capture1.avi

Frame

Displays the current frame out of the total frames for the current clip in hours, minutes, seconds, frames, and frame count.

Total

Displays the current frame out of the total frames for the entire capture in hours, minutes, seconds, frames, and frame count.

Status

Displays the current operation.

Deck

Displays the current tape position in hours, minutes, seconds, frames, and frame count and the deck's current operation.

Skip button

Ends the current clip and proceeds to the next clip in the capture list.

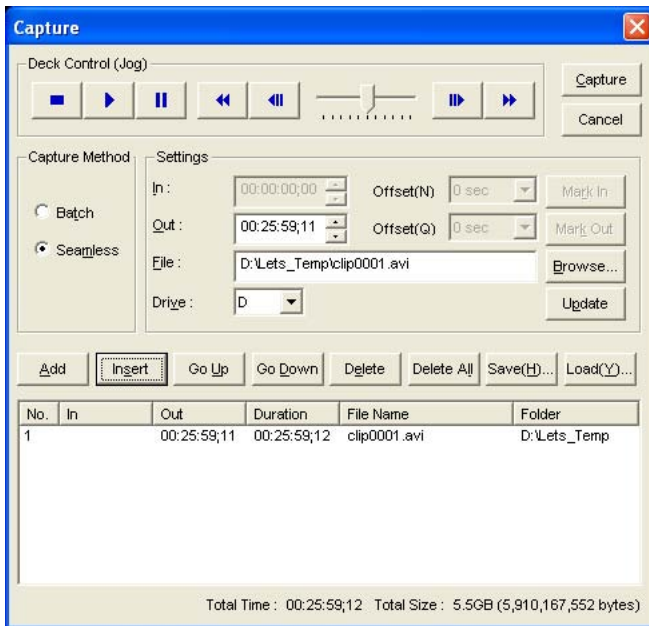
Stop button

Stops the batch capture at the current point, saving all clips that have been captured.

Cancel button

Stops the batch capture and discards all clips that have been captured.

Batch/Seamless capture - Seamless mode



Capture Method

Batch

Enables Batch capture mode.

Seamless

Enables Seamless capture mode. This option is unavailable when you capture clips in MPEG format.

Settings

Out

Duration of the clip plus one frame (clip duration will be one frame longer than the specified duration).

File

Filename for the captured clip.

Browse button

Opens a window to set the clip's filename.

Update button

Updates the selected list entry with the specified Out point (duration) and filename.

Insert button

Adds the current settings as a new clip before the selected clip in the capture list (or to the end of the capture list, if no there is no selection).

Go Up button

Moves the selected clip one position upward in the capture list.

Go Down button

Moves the selected clip one position downward in the capture list.

Delete button

Deletes the selected clip from the capture list.

Delete All button

Deletes all clips from the capture list.

Save button

Saves the capture list.

Load button

Loads a capture list.

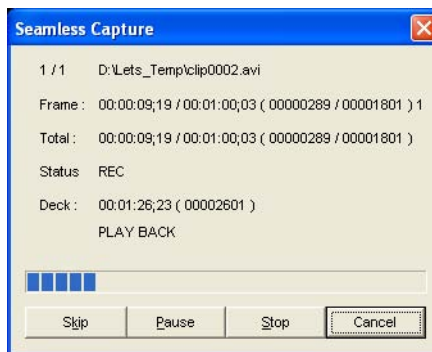
Capture button

Starts the seamless capture operation.

Cancel button

Clears the capture list and closes the Batch capture/Seamless capture window.

Seamless Capture progress



/ # xxxxx

Displays the current clip being captured, the total number of clips to be captured, and the current clip's filename. Ex. 1 / 2 D:\capture1.avi specifies that clip 1 of 2 clips is currently being captured and it is writing to D:\capture1.avi

Frame

Displays the current frame out of the total frames for the current clip in timecode and frame count.

Total

Displays the current frame out of the total frames for the entire capture in timecode and frame count.

Status

Displays the current operation.

Deck

Displays the current tape position in timecode and frames and the deck's current operation.

Skip button

Ends the current clip and proceeds to the next clip in the capture list.

Pause button

Pauses the capture.

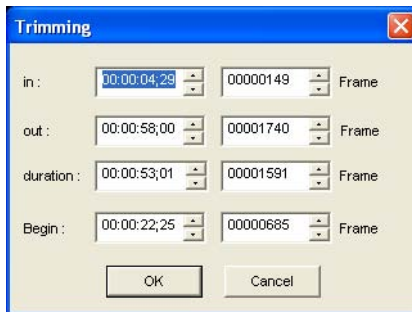
Stop button

Stops the seamless capture at the current point, saving all clips that have been captured.

Cancel button

Stops the seamless capture and discards all clips that have been captured.

Trim clip



In

Sets the In point for the clip in hours, minutes, seconds, and frames or by frame count.

Out

Sets the Out point for the clip in hours, minutes, seconds, and frames or by frame count.

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Duration

Sets the Duration for the clip in hours, minutes, seconds, and frames or by frame count.

Begin

For non-Main AV clips, sets the start position of the clip in hours, minutes, seconds, and frames or by frame count.

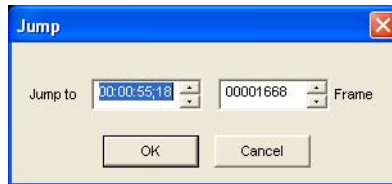
OK

Accept the changes to the In, Out, Duration, and Begin points and close the dialog.

Cancel

Cancel changes and close the dialog.

Jump...



Jump to

Jump to a specific timecode or frame number in the timeline.

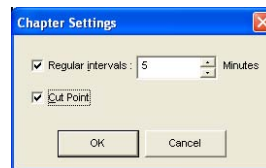
OK

Close the dialog and jump to the specified timecode or frame number.

Cancel

Close the dialog and do nothing.

Chapter Setting



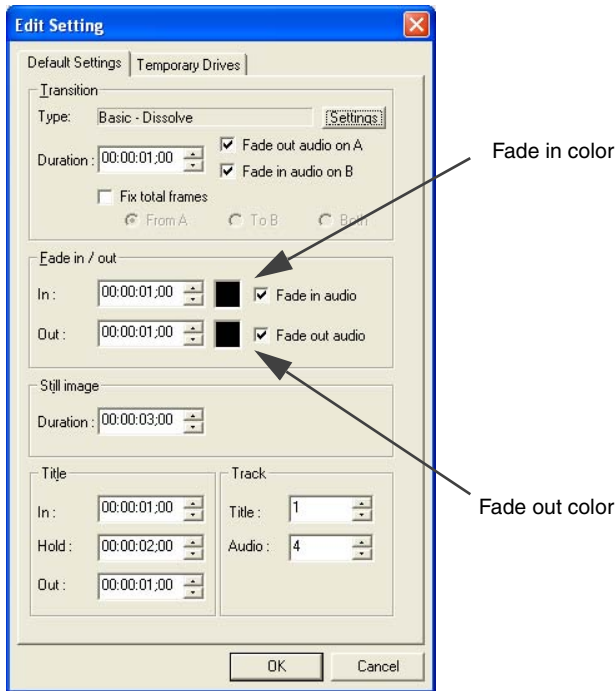
Regular intervals

When checked, chapters are set by the specified intervals.

Cut Point

When checked, chapters are set at all the cut points.

Default Edit Settings - Default Settings



Transition

Type

Displays the default transition type.

Settings button

Brings up the Transition dialog to select the default transition.

Duration

Sets the duration of the default transition in hours, minutes, seconds, and frames.

Fade out audio on A checkbox

When checked, audio on the first clip will automatically be set to fade out during the transition.

When unchecked, audio levels on the first clip will not be changed.

Fade in audio on B checkbox

When checked, audio on the second clip will automatically be set to fade in during the transition.

When unchecked, audio levels on the second clip will not be changed.

Fix total frames checkbox

When checked, transitions added to the timeline will extend the In and/or Out points of the B and/or A clips (if possible) so the total length of the timeline is unchanged.

From A

The Out point of the first clip is extended so the total length of the timeline remains unchanged when the transition is added.

From B

The In point of the second clip is extended so the total length of the timeline remains unchanged when the transition is added.

Both

Both the Out point of the first clip and In point of the second clip are extended so the total length of the timeline remains unchanged when the transition is added.

Fade in / out

In

Sets the default duration for fade in, in hours, minutes, seconds, and frames.

Fade in color

Click to set the default Fade in color.

Fade in audio checkbox

When checked, audio is automatically set to fade in when a fade in is added.

Out

Sets the default duration for fade out, in hours, minutes, seconds, and frames.

Fade out color

Click to set the default Fade out color.

Fade out audio checkbox

When checked, audio is automatically set to fade out when a fade in is added.

Still image

Duration

Sets the default duration for still images in hours, minutes, seconds, and frames.

Title

In

Sets the default In Motion duration for titles in hours, minutes, seconds, and frames.

Hold

Sets the default Hold duration for titles in hours, minutes, seconds, and frames.

Out

Sets the default Out Motion duration for titles in hours, minutes, seconds, and frames.

Track

Title

Sets the number of title tracks available on the timeline. Titles in the hidden tracks can still be shown in the preview, but cannot be edited unless made visible.

Audio

Sets the number of Ex Audio tracks available on the timeline. Audio in the hidden tracks can still be heard in the preview, but cannot be edited unless made visible.

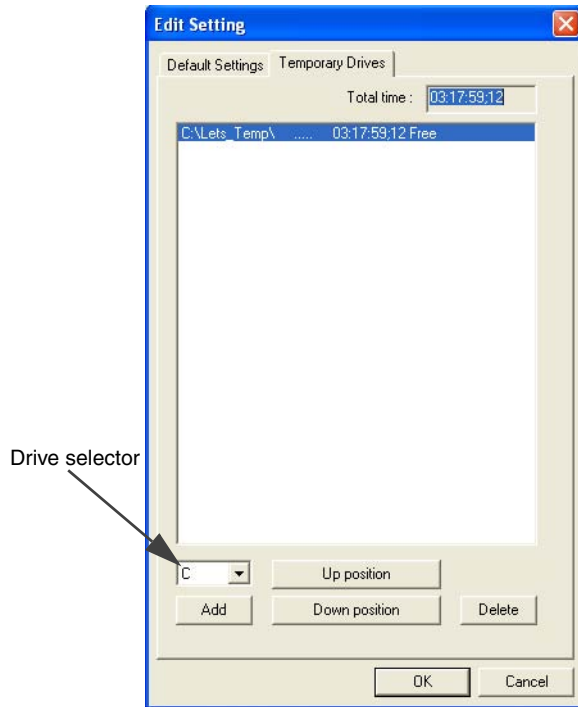
OK

Accept changes and close the dialog.

Cancel

Cancel changes and close the dialog.

Default Edit Settings - Temporary Drives



Total time

Displays the total storage time of all temporary drives in the list.

Drive selector

Select a drive from the drop-down to add it to the list.

Add button

Click the Add button to add the selected drive to the temporary drives list.

Up position button

Click a drive entry and click the Up position button to move it up in the list (higher priority).

Down position button

Click a drive entry and click the Down position button to move it down in the list (lower priority).

Delete button

Click a drive entry and click the Delete button to remove it from the temporary drives list.

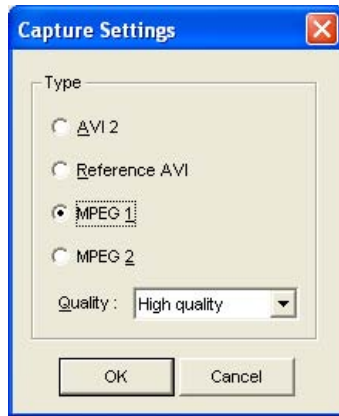
OK

Accept changes and close the dialog.

Cancel

Cancel changes and close the dialog.

Capture file setting



AVI 2

When checked, the clip will be captured in AVI 2.0 format.

Reference AVI

When checked, the clip will be captured in reference AVI format.
The clip with the approximate duration of 180 minutes can be captured.

MPEG1

When checked, the clip will be captured in MPEG1 format.

MPEG2

When checked, the clip will be captured in MPEG2 format.

Quality

Specifies the operation mode for MPEG capturing mode.

High quality

Use this option, if you want to capture video with the highest quality. The bit rate of the captured clip will be: 950,000 for MPEG1, 8,000,000 for MPEG2.

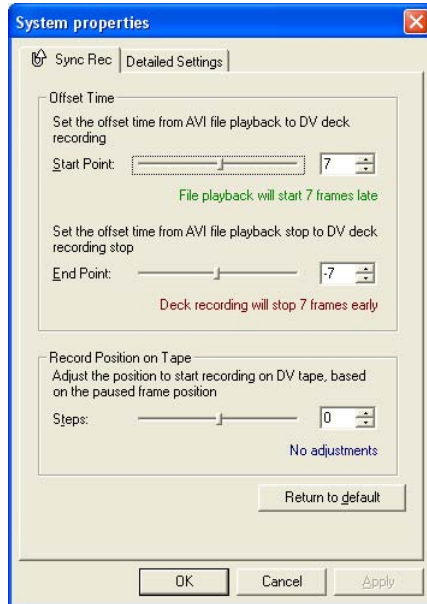
Standard

The bit rate of the captured clip will be: 800,000 for MPEG1, 5,000,000 for MPEG2.

Longest

Use this option, if you want to capture video as long as possible. The bit rate of the captured clip will be: 600,000 for MPEG1, 3,000,000 for MPEG2.

Let's EDIT Properties - SyncRec



Offset Time

Start Point

Sets the offset time between the file playback and the DV deck recording.

End Point

Sets the offset time between the file playback stop and the DV deck recording stop.

Record Position on Tape

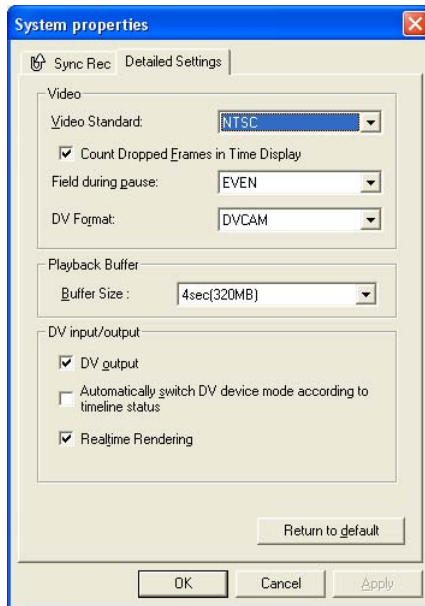
Steps

Adjust the position to start recording on DV tape, based on the paused frame position.

Return to default button

Reset the configured settings and restore the default settings.

Let's EDIT Properties - Detailed Settings



Video

Video Standard

Specifies the video standard.

Count Dropped Frames in Time Display

When checked, the time code is adjusted to the actual duration of time according to the dropped frame.

When unchecked the time code is shown based on the actual frame value.

Field during pause

Specifies the field to be shown while the playback is paused. By choosing either of ODD or EVEN, the image shown during pause will become more stable.

DV Format

Specifies the connected DV type between DV and DVCAM.

Playback Buffer

Buffer Size

Specifies the size of the playback buffer.

DV input/output

DV output

Enables the DV output.

Automatically switch DV device mode according to timeline status

Switches DV device mode automatically according to timeline status.

Realtime Rendering

When checked, the timeline will be encoded to DV on the software before outputting from IEEE1394 port.

Clip Properties - File Information



File Name

Name of the file.

Location

Drive and directory where the file is stored.

Size

File's size in MB and bytes.

Created

File's creation date.

Modified

File's modification date.

Audio

Audio sampling rate and number of bits

Play Time

File's play time

In

File's In point

Out

File's Out point

Duration

File's duration

Position

Current timeline cursor position (shown only when the timeline cursor is on the clip.)

Clip Properties - Rec Information

**Date**

Date the clip was recorded.

Time

Time the clip was recorded.

In

In point of the clip on tape.

Out

Out point of the clip on tape.

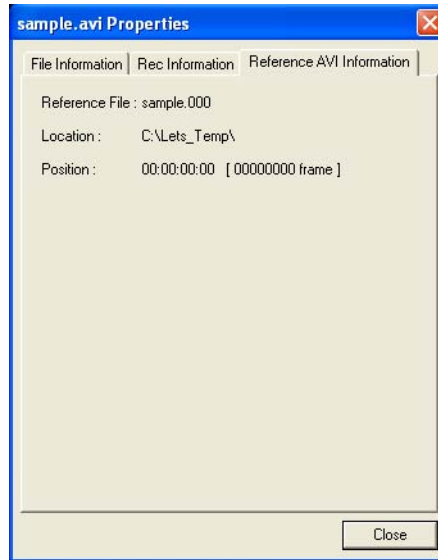
Position

Position of the clip on tape.

Source

Source type.

AVI Properties - Reference AVI Information

**Reference File**

The file(s) this reference AVI refers to.

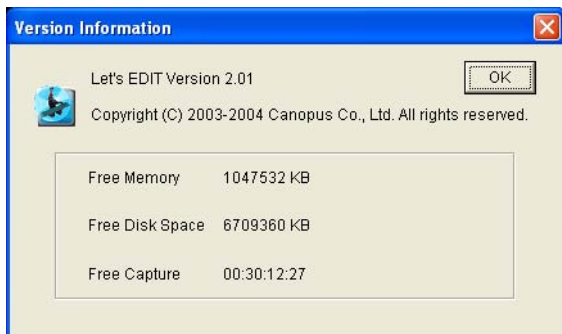
Location

The location of the referenced file(s).

Position

Current timeline cursor position (shown only when the timeline cursor is on the clip.)

About



Free Memory

Displays the amount of free memory in the system.

Free Disk Space

Displays the amount of free disk space on the temporary drive.

Free Capture

Displays the amount of video that can be stored on the drive listed for Free Disk Space, in hours, minutes, seconds, and frames, and in frame count.

Let's EDIT 2

Chapter 4

Transition Settings

This chapter describes the settings for the basic realtime Canopus transitions available in Let's EDIT 2.

Common options

The following options are available for all the transitions:

Use Video Frames

Checking this option shows the actual video frames in the transition preview, instead of the A and B placeholders.

Show Over Scan

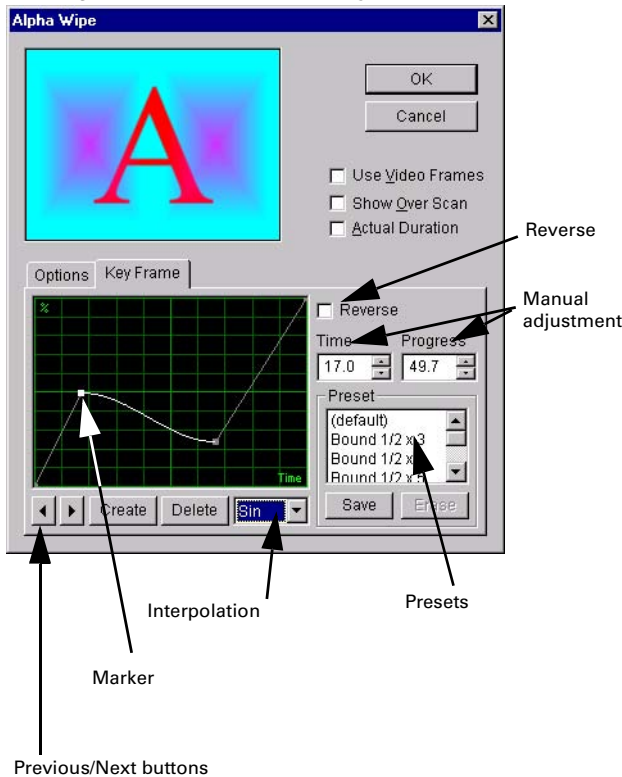
Checking this option brings up crop marks which show you the visible region of the video frame as it will appear in your final project.

Actual Duration

Checking this option makes the preview run at the actual duration of the transition, giving you a more accurate view of the transition's speed. You can modify the speed of the transition in the Key Frame tab. Key frames are “markers” that define the progress of a transition or filter at a given point in time.

By using key frames, you can adjust the speed of an effect, hold an effect at a particular point, and even reverse an effect. For example, a Circle transition could start by opening quickly, closing until almost closed, then quickly open to full video.

The key framing options appear in the **Key Frame** tab of each transition.



The key frame graph represents **Time** on the horizontal axis and the **Percent (%)** of the length of the transition on the vertical axis. Normally, transitions go in a linear manner from the start time (left side of graph) at 0% (bottom of graph) to the end time (right side of graph) at 100% (top of graph).

Adding, selecting, and removing key frames

To add a key frame, click the **Create** button - a white key frame marker will appear on the graph.

You can click and drag on the key frame marker to position it where you want it, or you can use the **Time** and **Progress** manual adjustments to move it, as well.

To select between key frame markers, click on the marker, or use the left and right triangle buttons to move between the previous and next key frame marker.

To remove a key frame, select it and click the **Delete** button.

Adjusting key frame interpolation

You can adjust the interpolation (averaging) between key frames by selecting a key frame and choosing one of the **Key frame interpolation** options in the drop-down menu next to the **Delete** button.

Linear

Linear interpolation means that the progress from one key frame to another is a straight line. Linear interpolation results in abrupt changes in the progress of the transition. For example, if you set a transition to go from 0% at start to 50% halfway, then back to 0% at the end using Linear interpolation, the “shift” between forward progress and backward progress at the middle of the transition will be very noticeable. Change occurs suddenly with linear interpolation.

Sine

Sine interpolation uses a sine curve to smooth the area between key frames. Change occurs smoothly with sine interpolation.

Accelerated

Accelerated interpolation starts slowly and ends quickly.

Decelerated

Decelerated interpolation starts quickly and ends slowly.

Reversing key frame progress

Checking the **Reverse** option reverses the key frame settings.

Saving and loading key frame presets

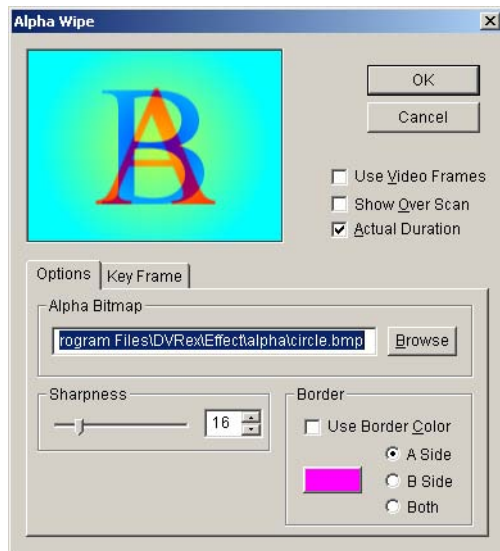
You can also save and load key frame presets for transitions.

To save custom key frame settings, click the **Save** button under the **Preset** list. After saving the custom key frame setting, it appears in the list. Key frame settings are global — saving a preset for one transition makes it available to all transitions.

To load a custom key frame setting, select it from the list.

To delete a custom key frame setting, select it from the list and click the **Erase** button. You can only delete presets that you create. You cannot delete the default key frame presets.

Alpha Wipe



A bitmap image wipes video in. Alpha wipes are similar to Premiere's gradient wipe.

Options Tab

Alpha Bitmap

Specifies which alpha bitmap file to use. Let's EDIT 2 includes many preset alpha bitmap files in the **Effect\Alpha** directory.

You can also use and create your own 640x480, 256-color grayscale bitmap files. Look at some of the installed bitmap files in the **Effect\Alpha** subdirectory to get an idea of how to create your own.

Sharpness

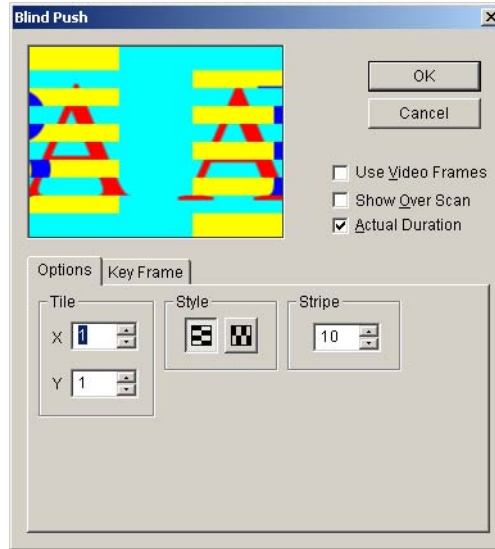
Determines how subtle the difference between Video A and B is at the edges of the transition. The higher the Sharpness setting, the more distinct the edges of the transition will be.

Use Border Color

When enabled, the specified color appears as a border between the A and B video clips during the transition.

- > **A Side** — Applies the border color to the Video A side of the transition.
- > **B Side** — Applies the border color to the Video B side of the transition.
- > **Both** — Applies the border color to both the Video A and Video B sides of the transition.

Blind Push



Video B divides into multiple stripes and Video B pushes Video A out.

Options Tab

X Tile

Number of horizontal repetitions that occur in the transition.

Y Tile

Number of vertical repetitions that occur in the transition.

Style

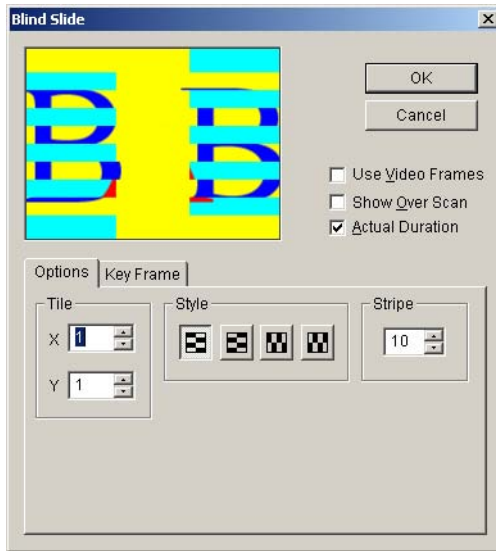
Determines how the sections enter the video frame.

Stripe

Number of stripes.

Blind Slide

Video B divides into multiple stripes and slides those stripes over Video A.



Options tab

X Tile

Number of horizontal repetitions that occur in the transition.

Y Tile

Number of vertical repetitions that occur in the transition.

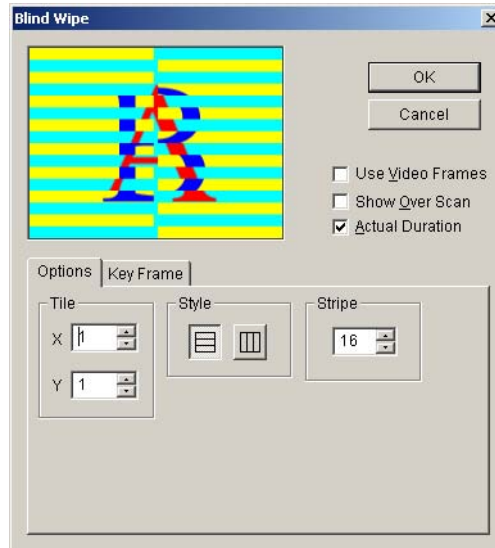
Style

Determines how the sections enter the video frame.

Stripe

Number of stripes.

Blind Wipe



Video B divides into multiple stripes and wipes Video A to show those stripes.

Options tab

X Tile

Number of horizontal repetitions that occur in the transition.

Y Tile

Number of vertical repetitions that occur in the transition.

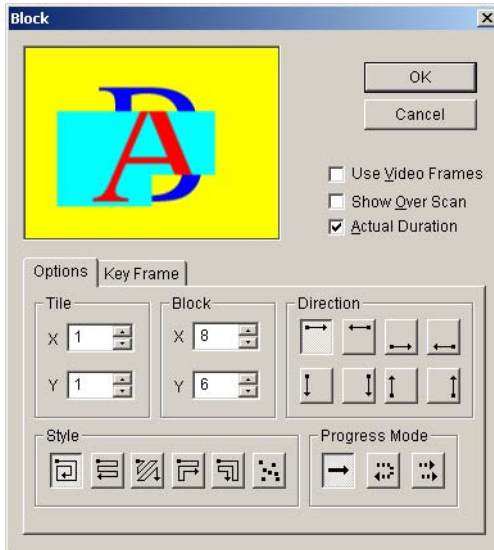
Style

Determines how the sections enter the video frame.

Stripe

Number of stripes.

Block



Video B divides into multiple blocks and pops the blocks over Video A.

Options tab

X Tile

Number of horizontal repetitions that occur in the transition.

Y Tile

Number of vertical repetitions that occur in the transition.

X Block

Number of horizontal blocks.

Y Block

Number of vertical blocks.

Direction

Determines from where and which way the blocks appear.

Style

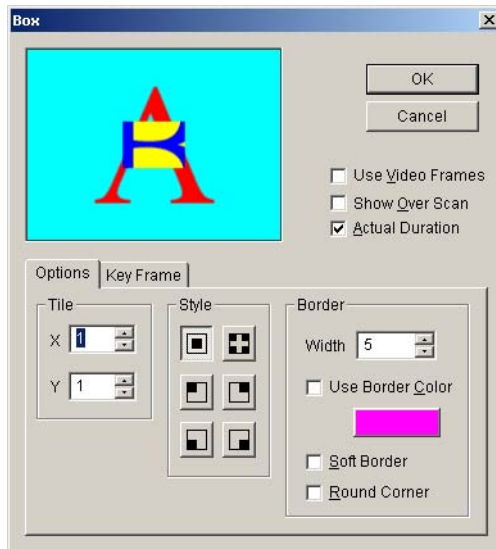
Determines how the blocks appear in the video frame.

Chapter 4 : Transition Settings

Progress Mode

Determines whether the block appearance goes linearly, skips forward then back, or is staggered.

Box



Video B appear as a group of growing boxes that fill over Video A.

Options tab

X Tile

Number of horizontal repetitions that occur in the transition.

Y Tile

Number of vertical repetitions that occur in the transition.

Style

Determines how and where the blocks appear in the video frame.

Border Width

Specifies the width of the border.

Use Border Color

When checked, a border of the selected color is used. When unchecked, no border is applied.

Border color

Determines the color of the border.

Chapter 4 : Transition Settings

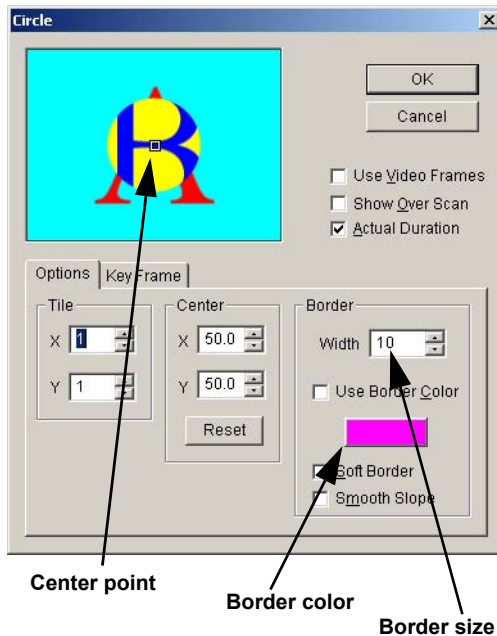
Soft Border

Softens the border with a slight feathering.

Round Corner

Applies rounded corners to the border.

Circle



Video B appears as a group of growing circles that fills over Video A.

Options tab

X Tile

Number of horizontal repetitions that occur in the transition.

Y Tile

Number of vertical repetitions that occur in the transition.

Center

Drag the center point to move the center point of the circle or use the X and Y percentages to move it. Click the Reset button to re-center the center point.

Border Width

Specifies the width of the border.

Use Border Color

When checked, a border of the selected color is used. When unchecked, no border is applied.

Chapter 4 : Transition Settings

Border color

Determines the color of the border, if any.

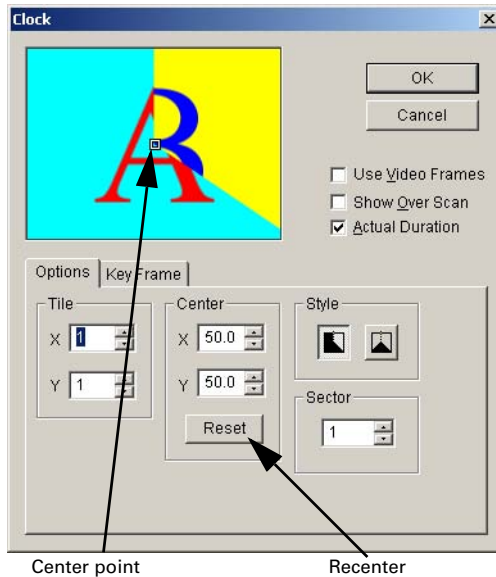
Soft Border

Softens the border with a slight feathering.

Smooth Slope

When checked, the soft border blending is smoothed.

Clock



Video B wipes over Video A in a sweeping motion.

Options tab

X Tile

Number of horizontal repetitions that occur in the transition.

Y Tile

Number of vertical repetitions that occur in the transition.

Center point

Drag the center point to move the center point of the circle or use the X and Y percentages to move it. Click the Reset button to re-center the center point.

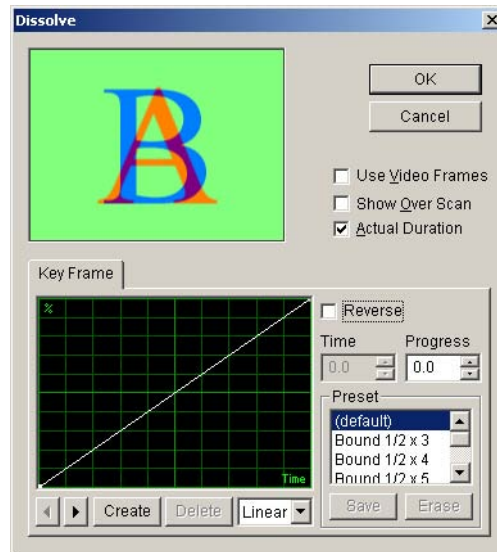
Style

Determines how the “wedges” are filled - from the center out, or by sweeping across.

Sector

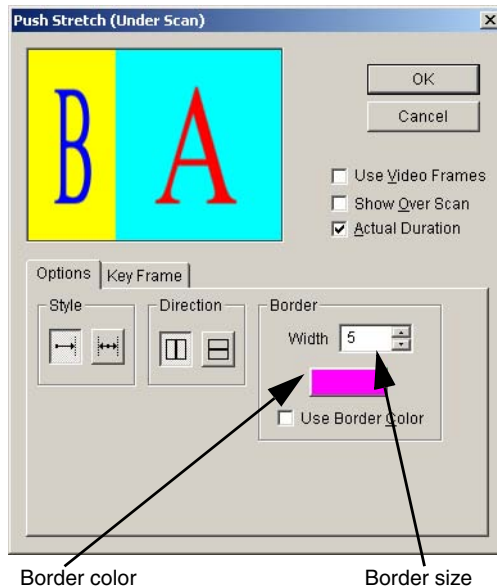
Determines the number of “wedges” in the transition.

Dissolve



Dissolve fades Video A out while simultaneously fading Video B in. You can modify the speed of the dissolve using the Key Frame tab.

Push Stretch (Under Scan)



Video B “squashes” Video A.

Options tab

Style

Determines how Video B comes in - from the side or the middle.

Direction

Determines whether Video B comes in horizontally or vertically.

Border Width

Specifies the width of the border.

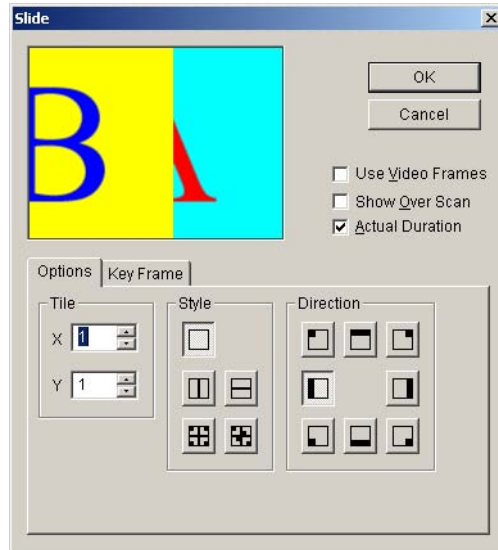
Border color

Determines the color of the border, if any.

Use Border Color

When checked, a border of the selected color is used. When unchecked, no border is applied.

Slide



Video B slides in over Video A.

Options tab

X Tile

Number of horizontal repetitions that occur in the transition.

Y Tile

Number of vertical repetitions that occur in the transition.

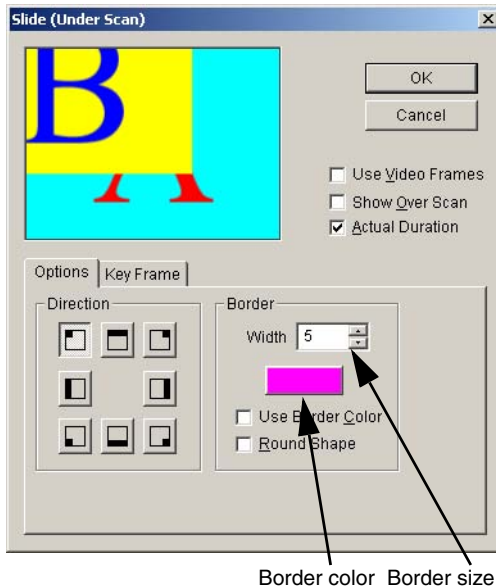
Style

Determines how Video B comes in.

Direction

Determines from which side or corner Video B enters the frame.

Slide (Under Scan)



Video B slides in over Video A with an optional border.

Options tab

Direction

Determines from which side or corner Video B enters the frame.

Border Width

Specifies the width of the border.

Border color

Determines the color of the border, if any.

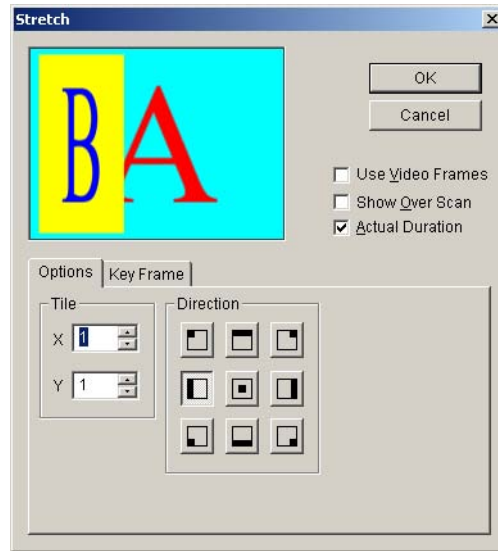
Use Border Color

When checked, a border of the selected color is used. When unchecked, no border is applied.

Round Shape

Applies rounded corners to the border.

Stretch



Video B stretches over Video A.

Options tab

X Tile

Number of horizontal repetitions that occur in the transition.

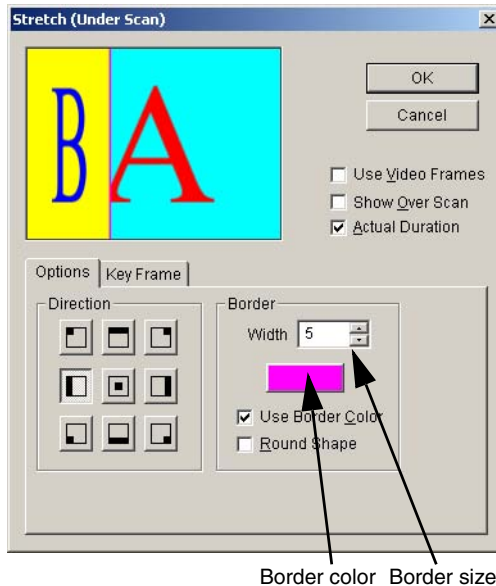
Y Tile

Number of vertical repetitions that occur in the transition.

Direction

Determines from which side or corner Video B enters the frame.

Stretch (Under Scan)



Video B stretches over Video A with an optional border.

Options tab

Direction

Determines from which side or corner Video B enters the frame.

Border Width

Specifies the width of the border.

Border color

Determines the color of the border, if any.

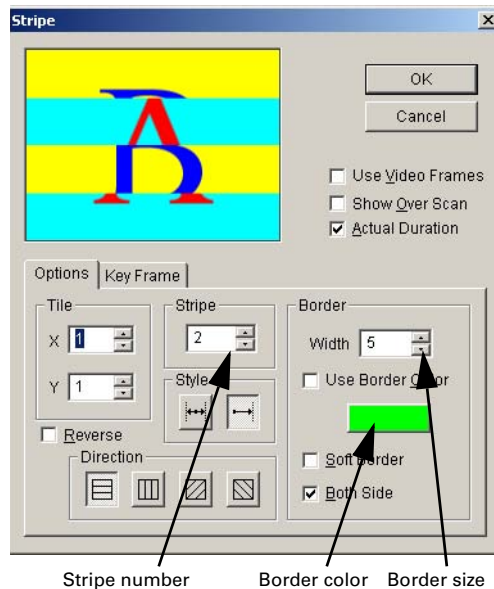
Use Border Color

When checked, a border of the selected color is used. When unchecked, no border is applied.

Round Shape

Applies rounded corners to the border.

Stripe



Video B wipes over Video A in multiple stripes.

Options tab

X Tile

Number of horizontal repetitions that occur in the transition.

Y Tile

Number of vertical repetitions that occur in the transition.

Reverse

When checked, the direction of the stripe movement is reversed.
When unchecked, the direction of the stripe movement is normal.

Stripe

Specifies the number of stripes the video is divided in to.

Style

Determines how Video B comes in - from one side or from the middle.

Direction

Determines from which side or corner Video B enters the frame.

Border Width

Specifies the width of the border.

Use Border Color

When checked, a border of the selected color is used. When unchecked, no border is applied.

Border Color

Determines the color of the border, if any.

Soft Border

Softens the border with a slight feathering.

Both Side

Determines whether the border is applied to both sides of the stripe or just one.

Chapter 4 : Transition Settings

Let's EDIT 2

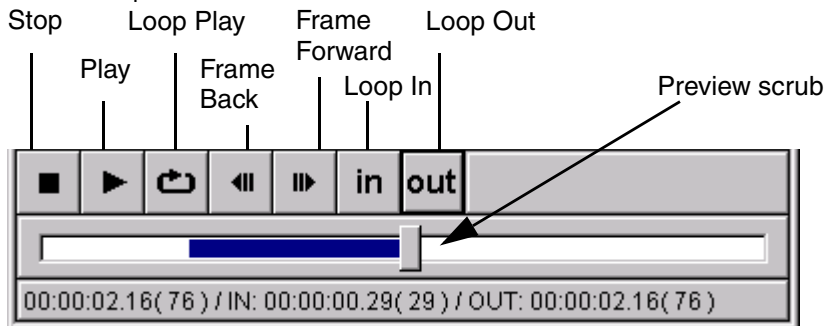
Chapter 5

Video Filter Settings

This chapter will describe the settings for the Canopus video filters available in Let's EDIT 2.

Filter Preview controls

All video filters have preview controls which let you control playback of the filtered clip.



Filter Preview controls



Tips

Use the in and out buttons to define a segment of the clip. Click

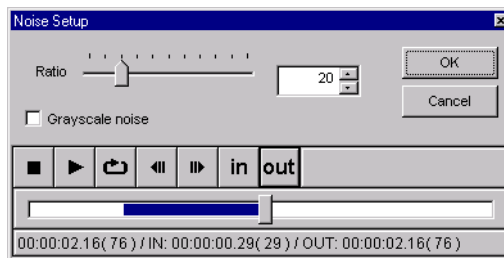
Loop Play to loop playback the segment, then adjust the filter settings while the video is playing. Depending on the length of the loop, it may take a second or two before you see the result of the filter.

Use the filter controls to start, stop, and loop playback of the filtered clip. You can even adjust settings while the clip is playing.

You can use the **in** and **out** buttons to set in and out points for loop playback.

Noise

The Noise video filter adds snow-like noise to your clip. The effect is similar to the static you get when you tune your television to a non-existent channel.



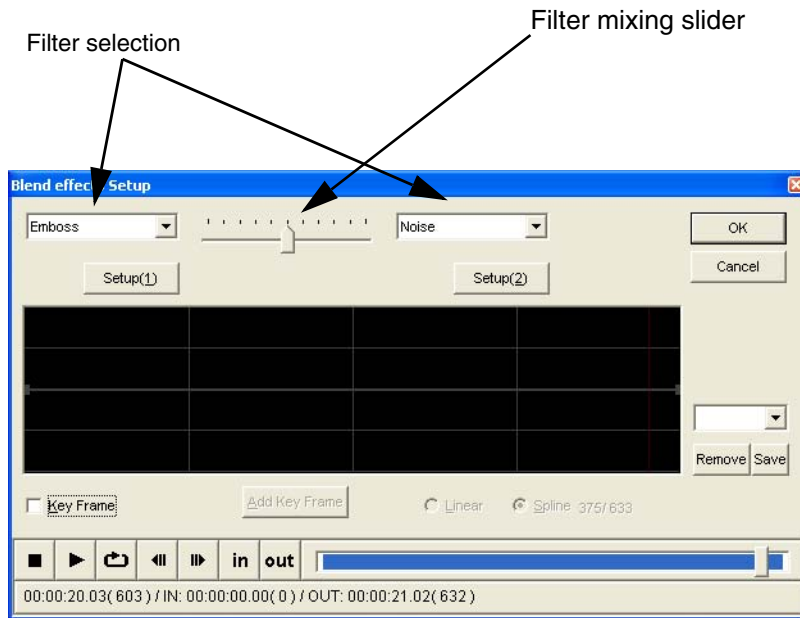
Noise filter dialog

Ratio adjusts the amount of noise - the larger the number, the more noise appears on the video.

Grayscale noise will make the generated noise grayscale instead of color.

Blend effects

The Blend effects video filter allows you to blend two filters together.



Blend effects dialog

You can select a filter from the drop-down lists to the left and right of the slider at the top. You can access the filter settings for a filter by clicking on the **Setup** button below the selected filter.

Filter mixing slider determines how much of each filter is applied. If you slide it all the way to the left, the filter specified on the left will be applied 100%. If you slide it all the way to the right, the filter specified on the right will be applied 100%. In the center, both filters are applied 50% each. The filter mixing slider is ignored if Key Frame is checked.

Key framing

Check the **Key Frame** box to key-frame the mixing of the filters. The bottom of the graph is 100% of the left filter, and the top of the graph is 100% of the right filter. If Key Frame is used, the filter mixing slider is ignored.

To add a key frame, click a point on the line and drag it to your desired position or click on the **Add Key Frame** button.

To delete a key frame, right-click on it.

Two methods of keyframe interpolation are available - Linear, and spline.

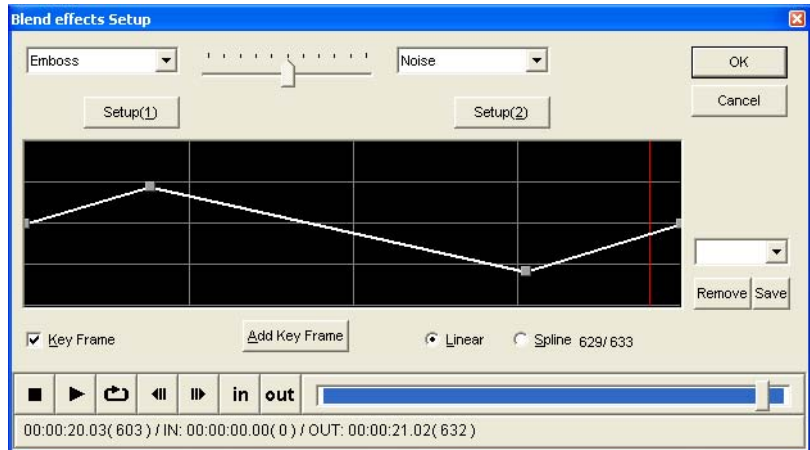


Tips

You can use the Blend effects filter to keyframe or restrict the application of another filter by blending with None.

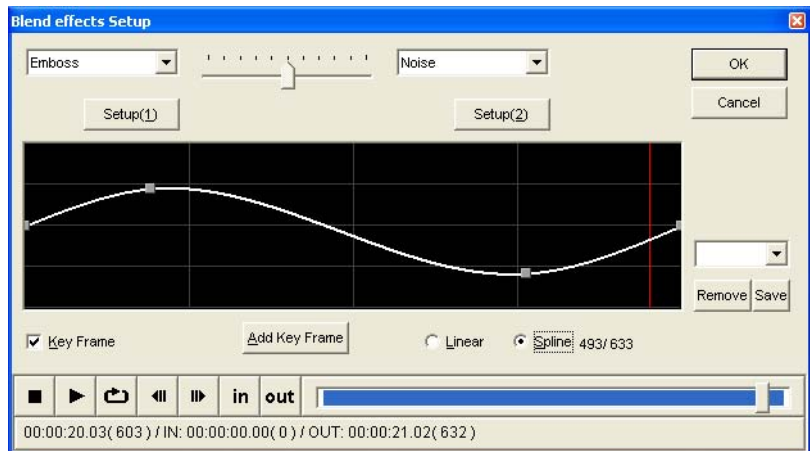
Chapter 5 : Video Filter Settings

Linear produces a linear interpolation, so changes appear quickly.



Blend effects keyframing with Linear

Spline produces a sine interpolation, so changes appear more gradually.



Blend effects keyframing with spline

The numbers below the graph (to the right of Spline) shows the current frame where the cursor is, and the total number of frames in the clip.

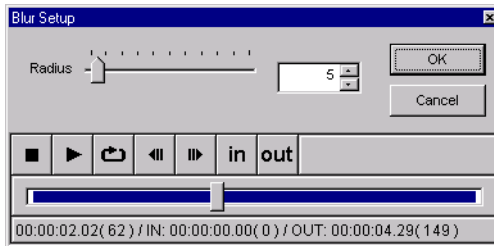
Saving and loading presets

You can save your filter settings by clicking in the white area above the Remove and Save buttons and typing a name in. Click the **Save** button to save your filter settings.

You can load a saved filter setting by choosing it from the list above the Remove and Save buttons.

Blur

The blur video filter applies a blur to your video clip.

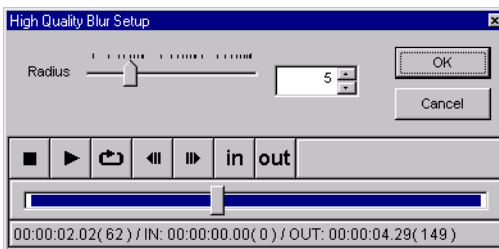


Blur dialog

Radius specifies the blur radius - the larger the radius, the greater the blur.

High Quality Blur

High quality blur applies a high quality blur to your video clip. High quality blur provides better quality than normal blur on clips that are bright or have high contrast. However, it does require more CPU power than the normal blur.



High Quality Blur dialog

Radius specifies the blur radius - the larger the radius, the greater the blur.

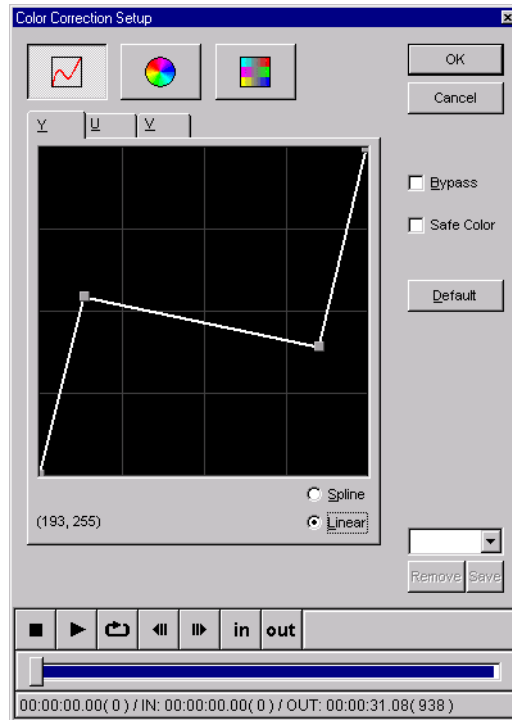
Color Correction

Color correction allows you to alter the color properties of your video. There are three methods to apply color correction - YUV graph, HSBC wheel, and sliders. Only one mode can be in effect at one time.

Chapter 5 : Video Filter Settings

YUV graph mode

To use color correction in YUV graph mode, click on the left-most button on the top of the color correction dialog.



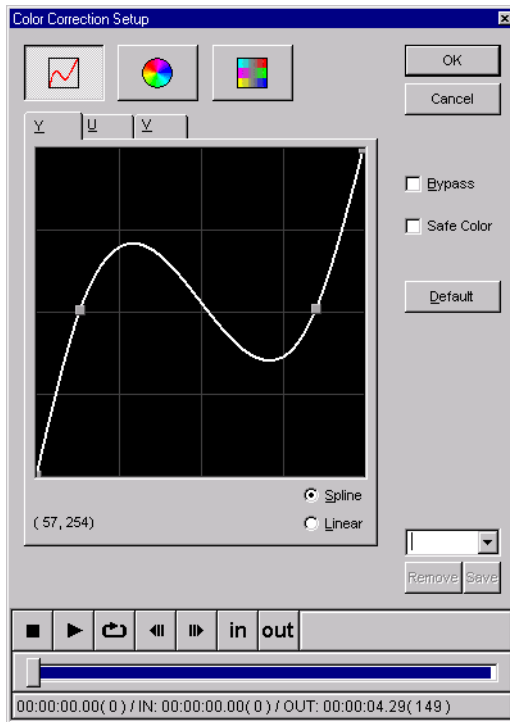
YUV graph mode - Linear interpolation

In YUV graph mode, you can graphically adjust the Y, U, and V values of the video by adding points to the line.

Adding and removing points works just like it does in the key framing dialogs of the other filters - left-click on the line to add a point, right-click on a point to delete it.

Linear produces a linear interpolation, so changes appear quickly.

Spline produces a sine interpolation, so changes appear more gradually.

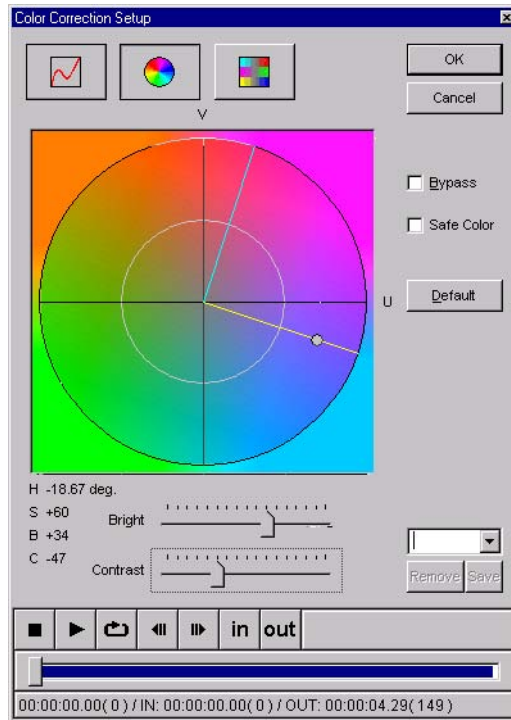


YUV Graph mode - spline interpolation

Chapter 5 : Video Filter Settings

HSBC wheel mode

Select HSBC wheel mode by clicking on the middle button at the top of the color correction dialog.



HSBC wheel mode

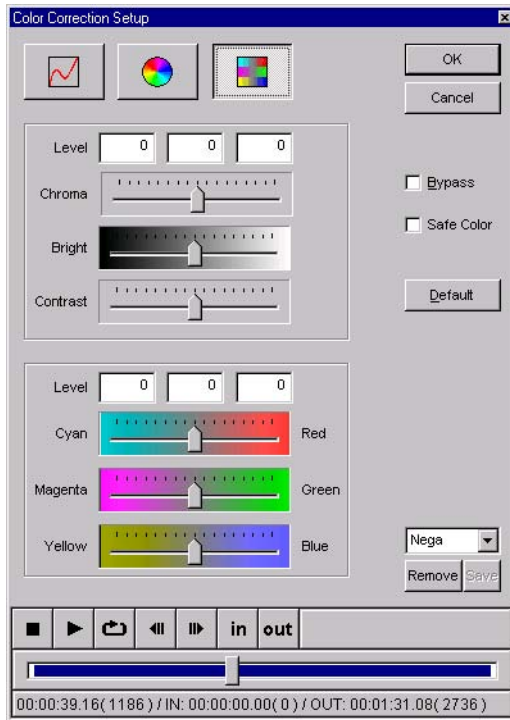
To adjust **Hue**, rotate the color wheel by clicking in a blank area and moving the mouse.

To adjust **Saturation** click on the grey dot and move it along the line.

To adjust **Brightness** and **Contrast**, use the sliders labeled **Bright** and **Contrast**.

Slider mode

Select slider mode by clicking on the right-most button at the top of the color correction dialog. Slider mode allows you to adjust the color settings by sliders.



Slider adjustment mode

Adjust **Chroma** using the **Chroma** slider, or enter a chroma adjustment value into the left-most box above the Chroma slider.

Adjust **Brightness** using the **Bright** slider, or enter a brightness adjustment value into the middle box above the Chroma slider.

Adjust **Contrast** using the **Contrast** slider, or enter a contrast adjustment value into the right-most box above the Chroma slider.

Adjust between **Cyan and Red** using the **Cyan/Red** slider, or enter a Cyan/Red adjustment value into the left-most box above the Cyan/Red slider.

Adjust between **Magenta and Green** using the **Magenta/Green** slider, or enter a Magenta/Green adjustment value into the middle box above the Cyan/Red slider.

Chapter 5 : Video Filter Settings

Adjust between **Yellow and Blue** using the **Yellow/Blue** slider, or enter a Yellow/Blue adjustment value into the right-most box above the Cyan/Red slider.

General options

Bypass removes the effect of the filter without removing the filter itself. Use this box to switch back and forth between the original and color corrected video.

Safe color ensures that the resulting video contains only NTSC-safe colors.

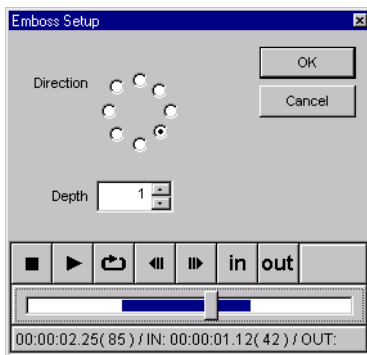
Saving and loading presets

You can save your filter settings by clicking in the white area above the Remove and Save buttons and typing a name in. Click the **Save** button to save your filter settings.

You can load a saved filter setting by choosing it from the list above the Remove and Save buttons.

Emboss

The emboss video filter provides a raised look to a video clip.



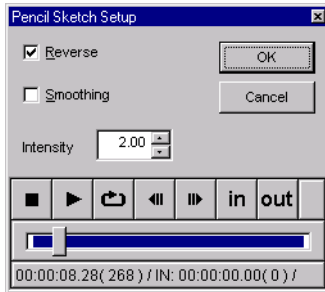
Emboss dialog

Direction specifies the direction of the emboss. Different directions produce different shadowing effects.

Depth specifies the emboss depth - the greater the depth, the greater the offset between “foreground” and “background.”

Pencil Sketch

The Pencil Sketch video filter makes the video look like someone drew it in pencil (or charcoal).



Pencil Sketch dialog

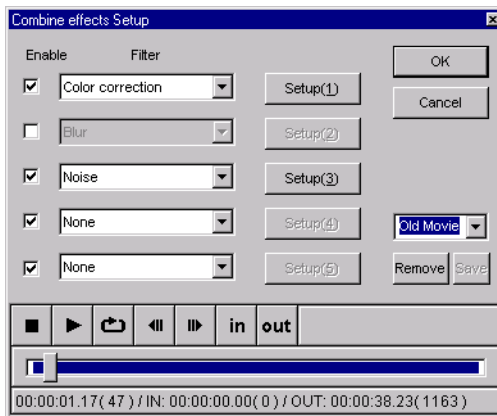
Reverse makes video appear black on a white background.

Smoothing makes the sketch appears less rough.

Intensity determines the contrast of the pencil sketch - the higher the intensity, the larger the sketch strokes.

Combine effects

The Combine effects video filter allows up to 5 combined effects on a video clip. Unlike Blend effects, Combine effects applies all filters equally.



Combine effects dialog



Tips

While you can also save sets of filters from the Video filter dialog, in some cases Combine effects can use less CPU power.



Tips

Use Combine Effects as the target for Region, Chrominance, or Blend Effects to apply a number of filters instead of just a single filter.

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Selecting and setting up filters to combine

Choose filters to apply from the lists. You can access the filter's settings by clicking on the **Setup** button next to the filter selection.

Use the **Enable** checkbox to enable or disable a filter.

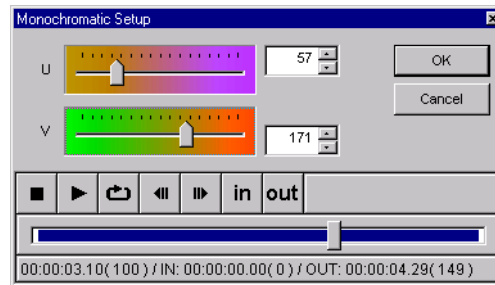
Saving and loading presets

You can save your filter settings by clicking in the white area above the Remove and Save buttons and typing a name in. Click the **Save** button to save your filter settings.

You can load a saved filter setting by choosing it from the list above the Remove and Save buttons.

Monochromatic

The Monochromatic video filter is used to grayscale or “tint” a video clip.

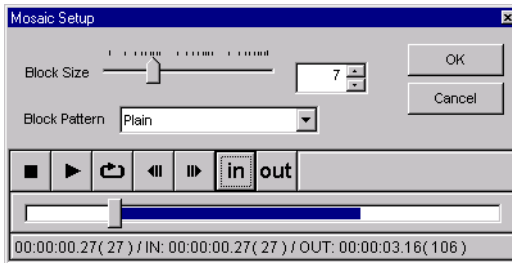


Monochromatic dialog

To tint video, adjust the **U** and **V** sliders, or enter your desired values in the entry boxes.

Mosaic

The Mosaic video filter reduces video to blocks for hiding identities and other purposes.



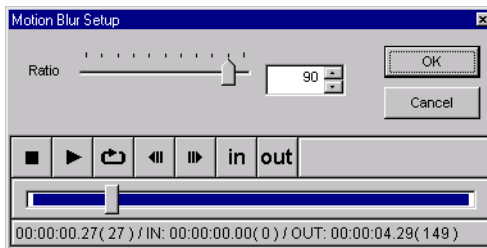
Mosaic dialog

Block Size determines the size of the mosaic blocks. The larger the value, the bigger the blocks are (and the harder it is to recognize the video).

Block Pattern determines the type of mosaic block used. There are many block types to choose from - choose the one that you like best.

Motion Blur

Motion Blur adds a blur to moving segments of video.



Motion Blur dialog

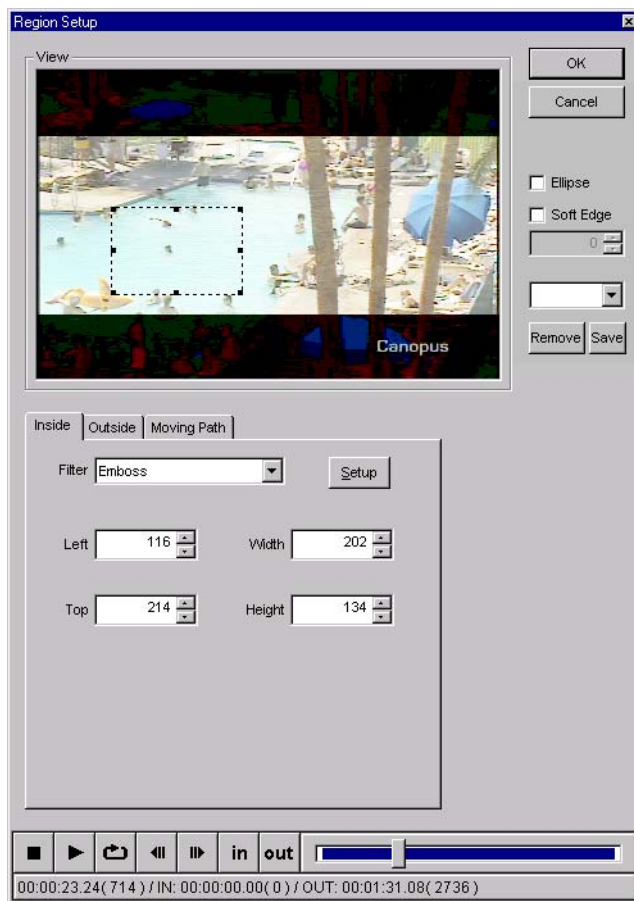
Ratio determines how much of a blur is applied. The larger the ratio, the more streaking there is in the blur.

Region

The Region filter allows you to define a rectangular or elliptical portion of the video frame and filter the inside and outside of that region. Additionally, a moving path may be defined for the region. This is often used with the Mosaic filter to hide the faces of people.

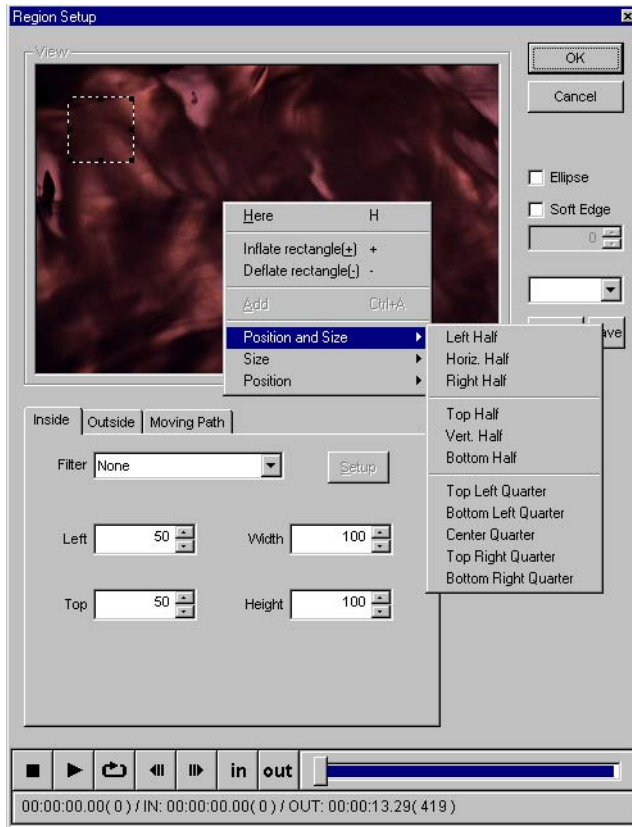
Defining a region

Define a rectangular region by sizing and moving the dotted rectangle with the mouse, or enter values in to the **Left**, **Top**, **Width**, and **Height** boxes.



Region dialog - Inside

Alternatively, you can choose the position and/or size of the region by selecting one of the presets. Right-click in the View area and choose a position and/or size from the menu.



Region dialog - Inside

The + and - keys will increase and decrease the size of the region by 1 pixel, respectively.

Pressing the **H** key will center the region at the cursor position.

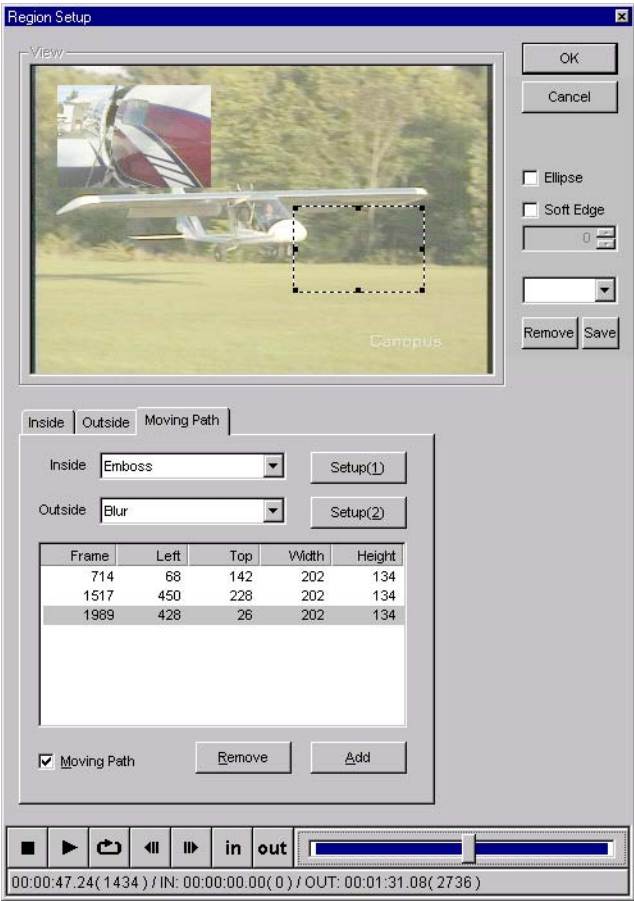
Add will add a motion keyframe at the current frame.

Applying filters

Apply filters to the inside or outside of the region by selecting a filter from the list. Access the filter's setup by clicking the **Setup** button next to the filter name.

Moving path

Click the Moving Path tab and check **Moving Path** to enable a motion path for the region.



Region dialog - Moving Path

To define a moving path, use the filter preview controls to position the video at the frame you want to start at, then position the rectangle selection where you want it on screen.

Click the **Add** button to add a key frame.

Use the filter preview controls to move get to another position in the video, then reposition the rectangle selection and click **Add** again to add another key frame.

The rectangle selection will move from position to position based on the key frames. You can also resize the selection at key frames to have it change shape.

To remove a key frame, select it in the list and click the **Remove** button.

You can also change the inside and outside filters and filter setup from the Moving Path tab.

General options

Ellipse, when checked, will apply an elliptical region instead of a rectangular region.

Soft Edge, when checked, will soften the edge of the region by the number of pixels in the box below the Soft Edge checkbox.

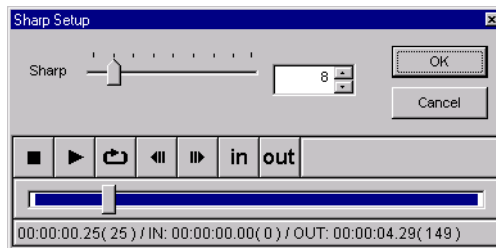
Saving and loading presets

You can save your filter settings by clicking in the white area above the Remove and Save buttons and typing a name in. Click the **Save** button to save your filter settings.

You can load a saved filter setting by choosing it from the list above the Remove and Save buttons.

Sharp

The Sharp video filter will sharpen the clip.

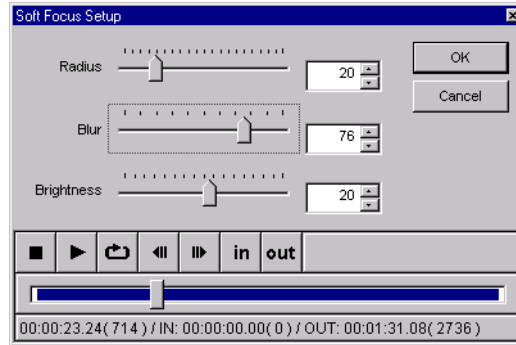


Sharp dialog

Sharp determines the level of sharpness applied. The higher the value, the more the filter is applied.

Soft Focus

The Soft Focus video filter gives a soft focus effect similar to a circular blur.



Radius determines the size of the blur - larger radius makes a larger blur.

Blur determines the amount of blur applied - the larger the setting, the more noticeable the blur is.

Brightness sets how much extra brightness is applied to the video - higher numbers mean more brightness.

Chrominance

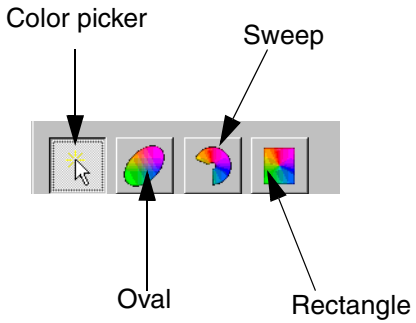
The chrominance filter allows you to apply filters inside and outside portions of video. However, unlike the Region filter, the chrominance filter defines its region by a specific color value.

You can use the Chrominance filter to achieve complex effects such as turning everything red in a scene blue, or making everything in a scene monochrome except for an object of a specific color.

Using the Chrominance filter involves two steps - creating a key by picking a target color range, and applying filters.

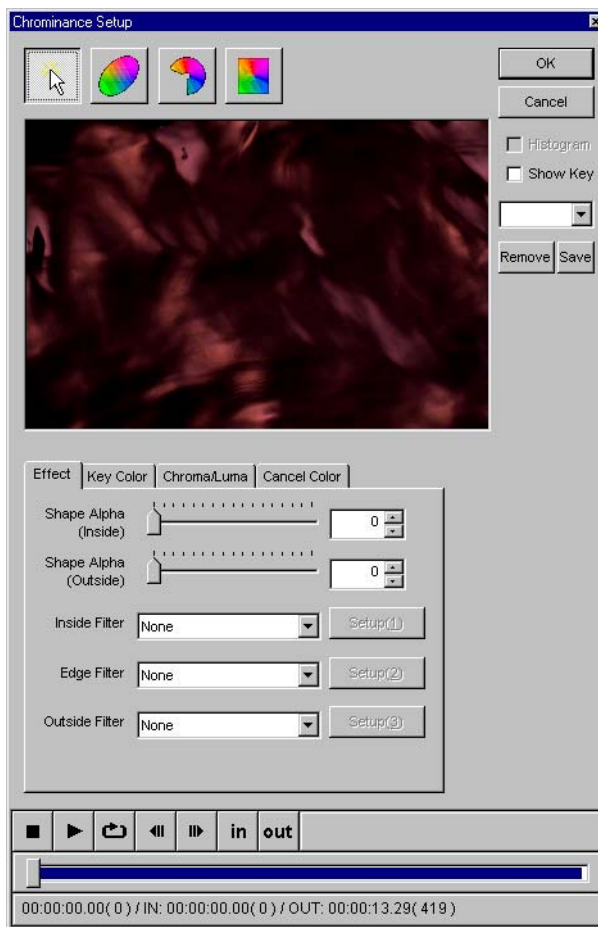
Creating a key by picking a target color range

There are four modes to pick the target color for the chrominance filter - Color picker, Oval, Sweep, and Rectangle.



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Color picker mode

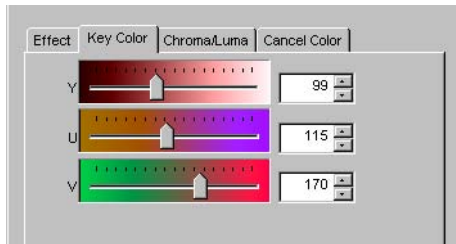


The color picker mode is the most straightforward way to use the chrominance filter.

Click the cursor in the image to select the key color.

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Check the Key Color tab to verify the color you have selected, or to manually select a color.

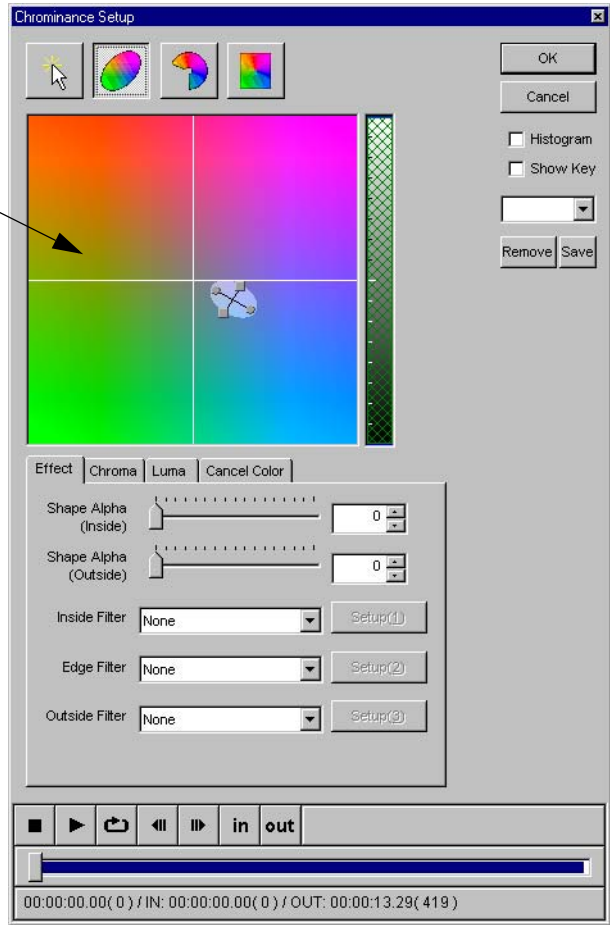


Key Color tab (Color Picker mode)

Chapter 5 : Video Filter Settings

Oval selection mode

Colorspace window

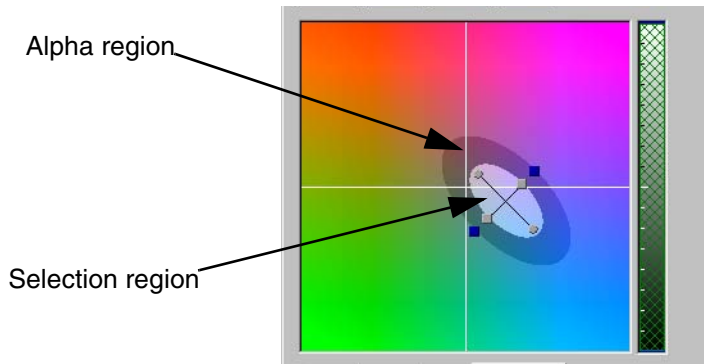


In Oval selection mode, the entire color range is mapped out on the colorspace window.

Move the oval by putting the cursor over it and dragging it.

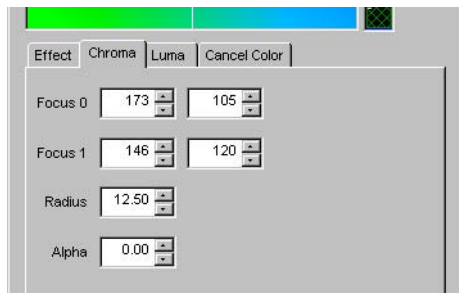
The light region within the oval specifies the color range to target. The selection region can be resized by clicking and dragging the handles with the cursor. The handles of the selection appear red when the cursor is over them.

Additionally, an extra alpha range where effects are partially applied can be defined by dragging the blue handles of the selector. The alpha selector handles appear yellow when the cursor is over them. The darker area around the bright oval represents the alpha region.



Oval colorspace picker

To specify the attributes of the oval manually, use the Chroma tab.



Chroma tab (Oval selection mode)

Focus 0 and **Focus 1** specify the focus locations for the oval (ellipse) on the U and V axes.

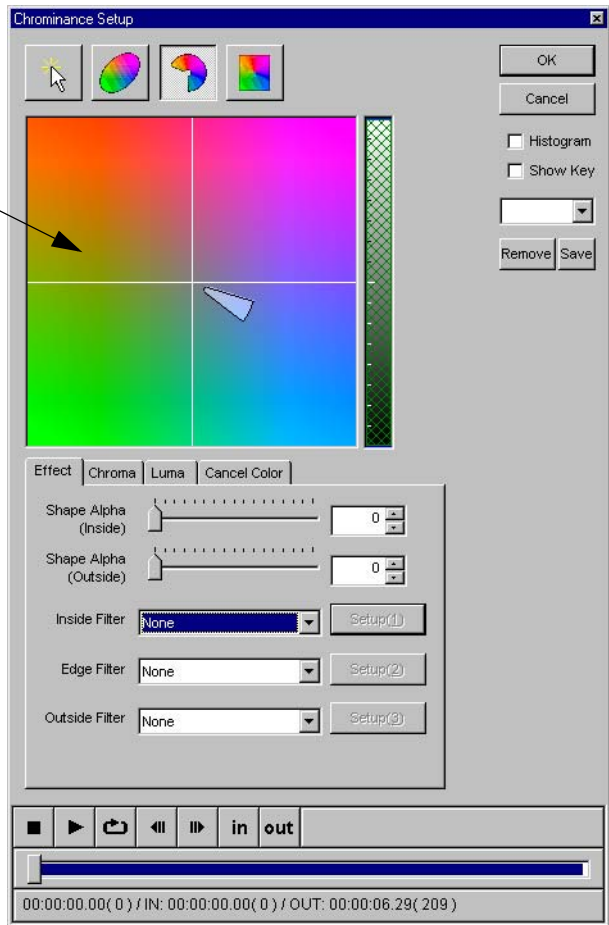
Radius sets the radius of the region of full selection. Within this region, filters will be fully applied.

Alpha sets the region beyond the oval where filters will be partially applied.

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Sweep selection mode

Colorspace window



In Sweep selection mode, the entire color range is mapped out on the colorspace window. White is at the center of the window. Sweep selection mode is especially useful when you want to select colors other than white.

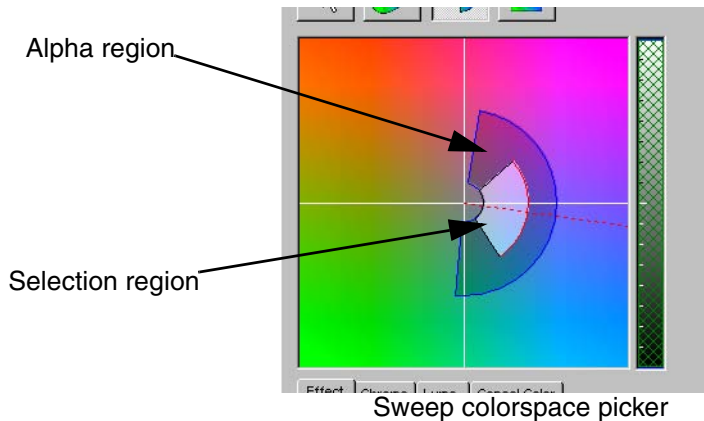
Move the orientation of the sweep by putting the cursor over it and dragging it.

The light region within the sweep specifies the color range to target. The selection region can be expanded or contracted by clicking and dragging the handles with the cursor. The edges of the selection appear red when the cursor is over them.

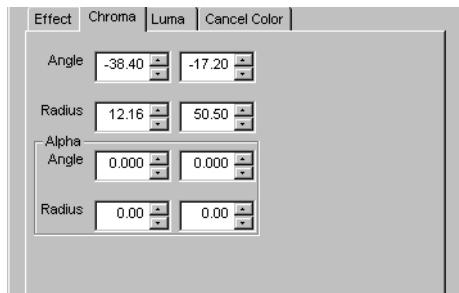
Chapter 5 : Video Filter Settings

Additionally, an extra alpha range where effects are partially applied can be defined by dragging the blue edges of the selector. The alpha selector edges appear yellow when the cursor is over them. The darker area around the bright sweep represents the alpha region.

Both the radius and the angle can be changed by dragging the edges of the sweep.



To specify the attributes of the sweep manually, use the Chroma tab.



Chroma tab (Sweep selection mode)

The **Angle** boxes specify the start and end angles (in -90 to 90 degrees) for the sweep.

The **Radius** boxes set the start and end radii of the sweep. Within this region, filters will be fully applied.

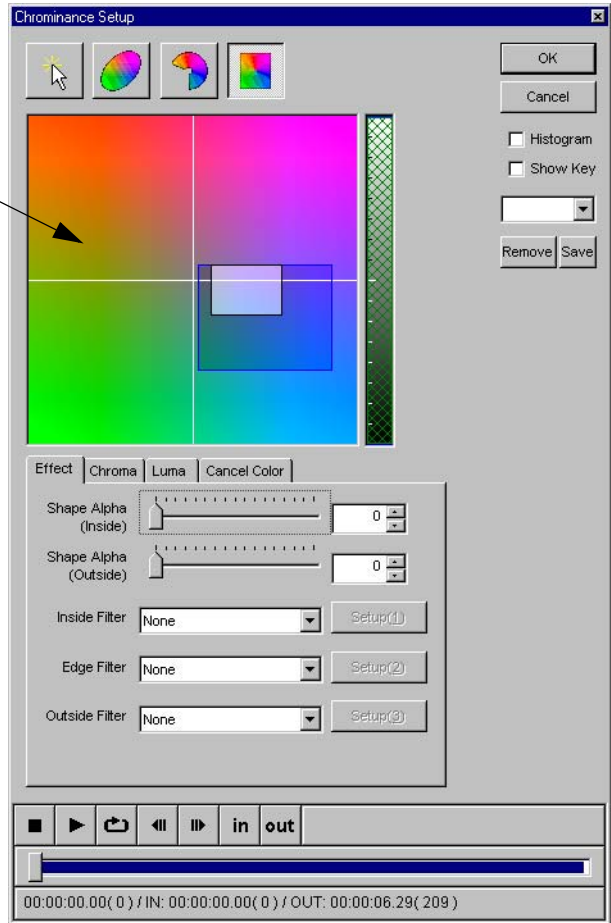
The **Alpha Angle** boxes set the angular region beyond the sweep where filters will be partially applied.

The **Alpha Radius** boxes set the start and end radii of the region beyond the sweep where filters will partially be applied.

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Rectangle selection mode

Colorspace window



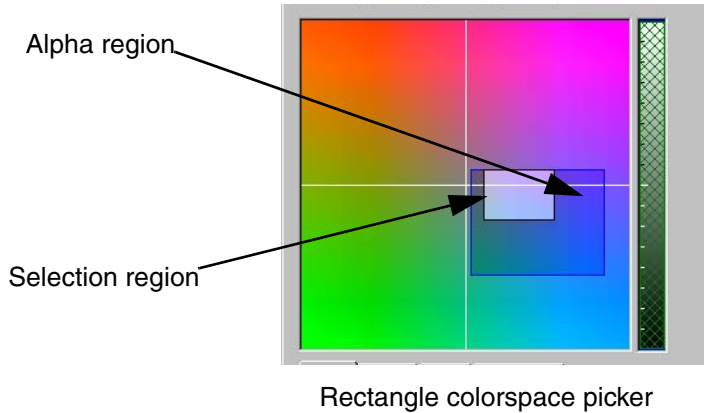
In Rectangle selection mode, the entire color range is mapped out on the colorspace window.

Move the rectangle by putting the cursor over it and dragging it.

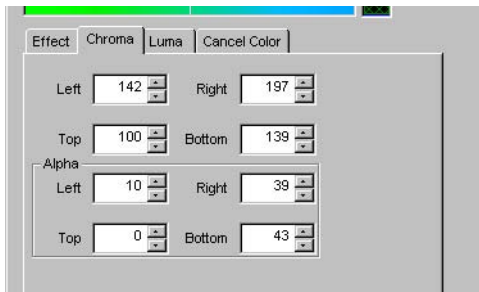
The light region within the rectangle specifies the color range to target. The selection region can be resized by clicking and dragging the handles with the cursor. The edges of the selection appear red when the cursor is over them.

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Additionally, an extra alpha range where effects are partially applied can be defined by dragging the blue edges of the selector. The alpha selector edges appear yellow when the cursor is over them. The darker area around the bright rectangle represents the alpha region.



To specify the attributes of the rectangle manually, use the Chroma tab.



Chroma tab (Rectangle selection mode)

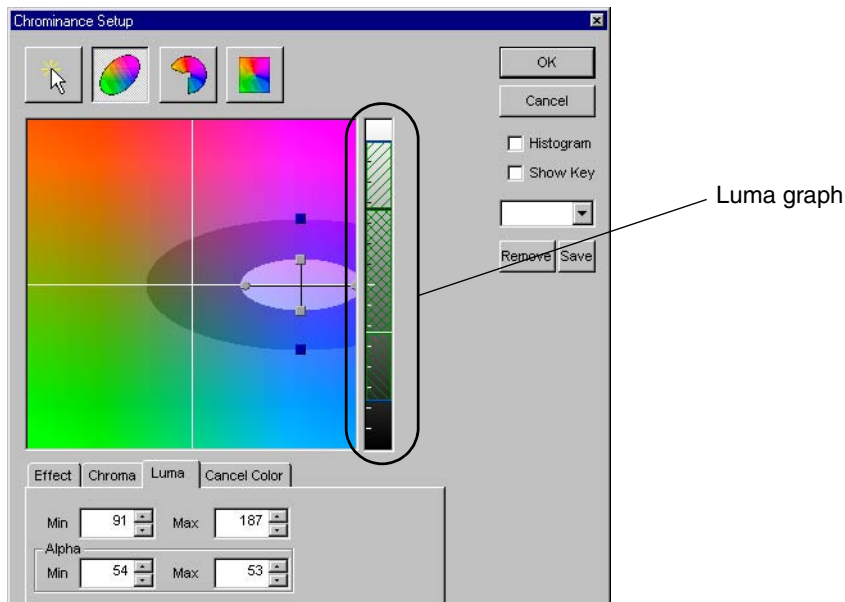
Left, **Right**, **Top**, and **Bottom** specify the coordinates of the selection area.

Alpha Left, **Alpha Right**, **Alpha Top**, and **Alpha Bottom** specify the offsets of the alpha region around the selection area.

Chapter 5 : Video Filter Settings

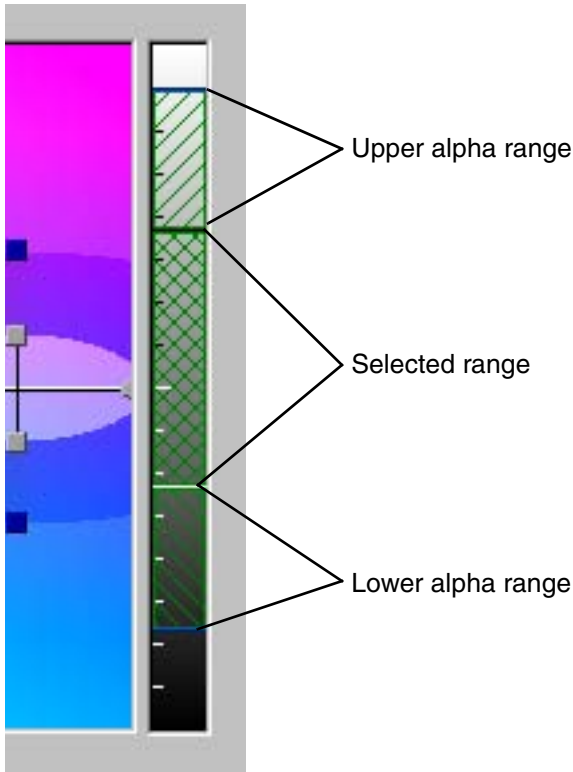
Restricting the target within a Luma range (Oval, Sweep, and Rectangle selection modes)

When using the Oval, Sweep, or Rectangle selections, you can further restrict the target region by using the Luma graph.



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Use the Luma graph to restrict the target area to a specific luminance range. The luma graph defines three regions - the upper alpha range, the selected range, and the lower alpha range.



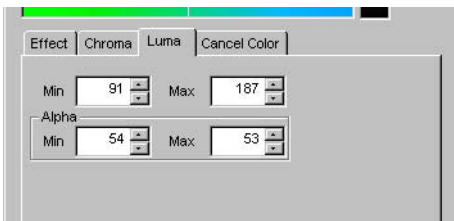
The upper and lower alpha ranges are areas of partial application, while the selected range is fully applied.

To change the upper or lower limit of the upper or lower alpha range, drag the line at the top or bottom of the area. The dividing line will turn yellow when the cursor is over it.

To change the upper or lower limit of the selected range, drag the black line at the top or bottom of the selected range. The dividing line will turn red when the cursor is over it.

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You can also manually set the luminance ranges in the Luma tab.



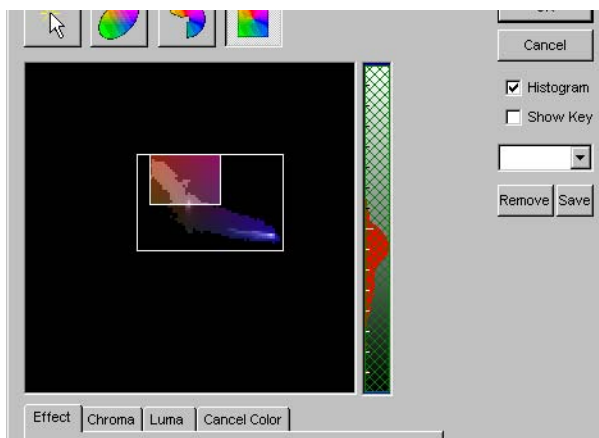
Luma tab

Min and **Max** specify the minimum and maximum luminance values where filters will be fully applied.

Alpha Min and **Alpha Max** specify the minimum and maximum ranges for the lower and upper alpha ranges, respectively.

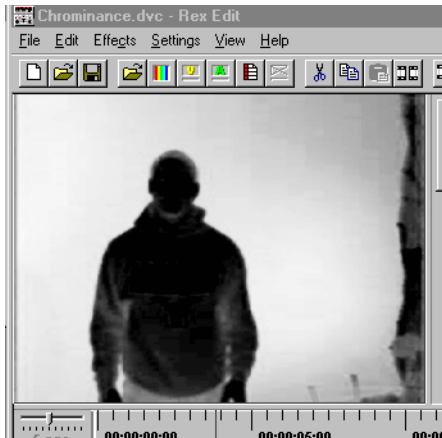
Histogram (Oval, Sweep, and Rectangle selection modes)

Check the **Histogram** box to display the colors used in the current frame in the colorspace window. This can aid you in selecting the appropriate chroma and luma range.



Histogram display

Show Key (all selection modes)

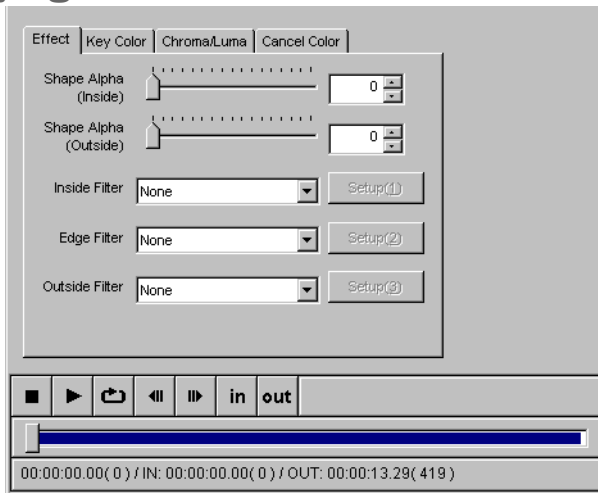


Key display

Check the **Show key** box to display the key in the preview instead of the filtered image. Use this mode to easily adjust your color selection.

The white regions represent the selected area, the gray regions are the partially selected (alpha) areas, and the black regions are the unselected areas.

Applying filters



Effect tab

In the Effect tab, you can select the filters you're using, and also adjust the amount of filtering done.



Tips

If you leave the Show key box selected, you can export the key as a clip for use as a matte in other programs.

Shape Alpha (Inside) will vary the gradation between the selected and unselected area in the key. This varies the amount the inside filter is applied between the selected region and the unselected region.

Shape Alpha (Outside) will vary the gradation between the edge and the unselected area in the key. This varies the amount the edge filter is applied between the edge and the unselected region.

The **Inside Filter** will be applied to the area within the selected region.

The **Edge Filter** will be applied to the edge of the key.

The **Outside Filter** will be applied to the colors that are not selected.

You can access the setup for each filter by clicking the **Setup** button next to the selection box.

Advanced Options

Cancel Color



Cancel Color tab

Cancel Color allows you to apply some color inversion to the outside of the affected area. Cancel Color is only available when a single filter is being applied - Inside, Edge, or Outside, but not a combination.

Cancel Color is most useful to correct off-color shadows or reflections. For example, an object in front of a green chroma screen may have a muted green shadow. Using Cancel Color, you can neutralize the green and make the shadows appear normal blackish-gray.

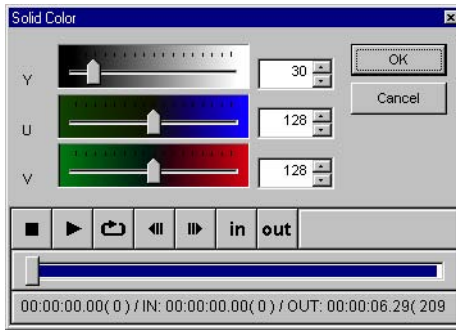
Range sets the size of the area corrected.

Power sets the amount of correction applied.

For best results, set both **Range** and **Power** to maximum, reduce the **Range** to an acceptable area, then reduce the **Power** until the color is corrected.

Solid color

The Solid color filter replaces video with a solid color. It is most useful in combination with other filters such as Region or Chromakey.

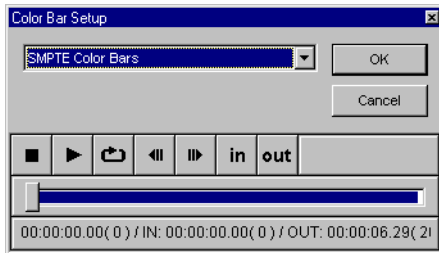


Solid Color dialog

Use the **Y**, **U**, and **V** sliders to select the color for the filters. You can also input values directly into the boxes next to each slider.

Color Bars

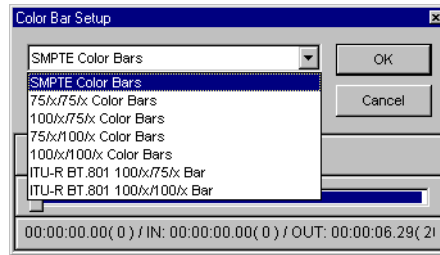
The Color Bars filter replaces the clip with standard color bars.



Color Bars dialog

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Select the type of color bars you want from the drop-down. You can choose from SMPTE Color Bars, 75/x/75/x Color Bars, 100/x/75/x Color Bars, 75/x/100/x Color Bars, 100/x/100/x Color Bars, ITU-R BT.801 100/x/75/x Bar, ITU-R BT.801 100/x/100/x Bar, and SPECIAL Bar.



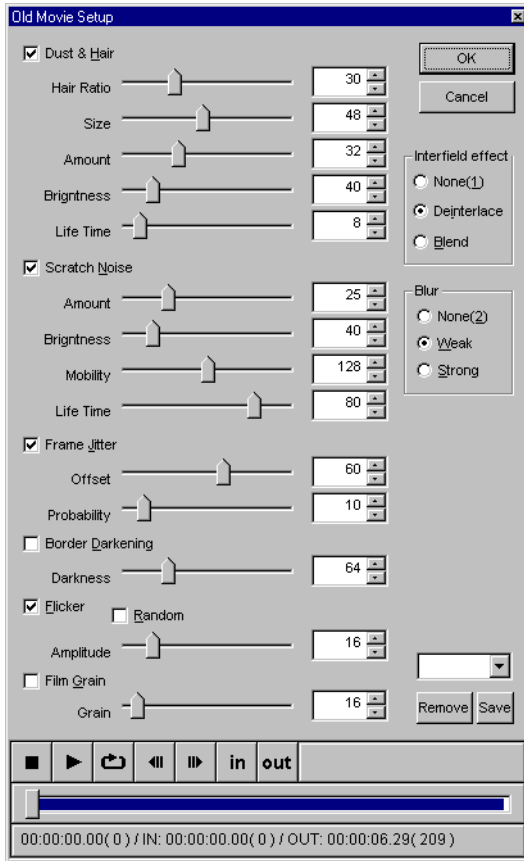
Color bar selections

In the case of 100/x/75/x Color Bars, the white saturation is 100%, and the color saturation is 75%.

NTSC/PAL, 4:3/16:9, and 0 IRE/7.5 IRE are automatically determined by the Let's EDIT 2 settings.

Old Movie

The Old Movie filter adds a film-like effect to your video. Combined with a colorization filter such as Monochromatic, you can achieve a very nice film look.



Old Movie dialog

Check **Dust & Hair** to enable dust and hair effects on the video. Dust appears as tiny dots, while hair appears as curved lines.

Hair Ratio specifies the ratio of hair to dust. The further the slider is to the right, the more hair and less dust there is. The further the slider is to the left, the more dust and less hair there is.

Size specifies the size of dust and hair particles. The larger the number, the larger the size.

Amount specifies the amount of dust and hair particles. The greater the amount, the more dust and hair will appear on the video.

Brightness specifies the brightness of the dust and hair. The higher the value, the closer to white the dust and hair will be.

Life Time specifies the length of time the dust and hair stay on the video. The longer the life time, the longer dust and hair particles will stay on screen.

Check **Scratch Noise** to enable scratches in the video. Film scratches appear as vertical lines in the video.

Amount specifies the amount of scratches in the video. The higher the amount, the more scratches will appear.

Brightness controls the brightness of the scratches. The higher the brightness, the closer to white the scratches will be.

Mobility determines the horizontal distance that scratches can move. The larger the mobility, the further across the frame scratches will travel.

Life Time specifies the amount of time scratches remain on the video. The larger the life time, the longer scratches will stay on screen.

Check **Frame Jitter** to enable jittering in the video.

Offset determines how far vertically frames will jitter. The larger the amplitude, the more the video will appear off-set when a jitter occurs.

Probability determines how often jitter will occur. The higher probability, the more often jitter will occur.

Check **Border Darkening** to darken the outer edge of the video border.

Darkness determines the darkness of the border. The larger the darkness setting, the darker the border of the video will be.

Check **Flicker** to enable flickering in the video.

Check **Random** to specify random flicker.

Amplitude determines the intensity of the flicker. The higher the amplitude, the more the flickered video will change in brightness.

Check **Film Grain** to enable film-grain type noise.

Grain adjusts the amount of grain noise. The larger the grain setting, the more noise and granularity will appear on the video.

Interfield effect adjusts the field handling.

None specifies no changes to fields. Fields are displayed normally.

Deinterlace displays only the deinterlaced even or odd fields.

Blend combines the odd and even fields into frames and displays frames.

Blur allows for adjustment of the blurring effect.

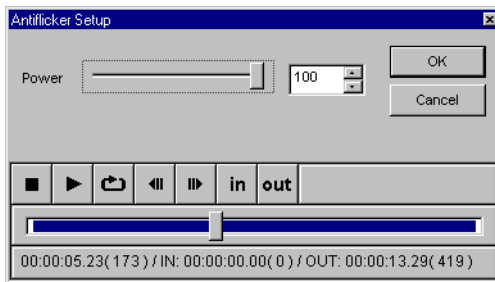
None specifies no blurring effect.

Weak applies a weak blur effect to the video.

Strong applies a strong blur effect to the video.

Antiflicker

Sometimes still images used in video show vertical flicker because of fine details that occur on only one field. Antiflicker can help to remove or reduce the flicker.



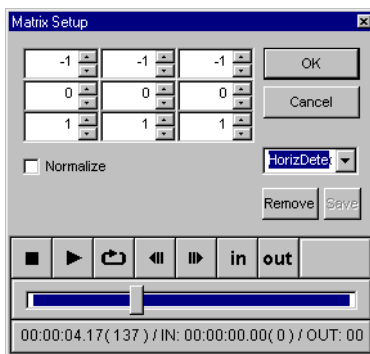
Antiflicker setup

The Antiflicker filter blends between the odd and even fields of video for each frame.

Adjust the **Power** slider to determine how much blending occurs. A power of 100 results in a full odd/even blend, while a power of 0 results in no blending at all.

Matrix

Matrix allows you to use a custom video filter matrix as a filter.



Matrix filter dialog

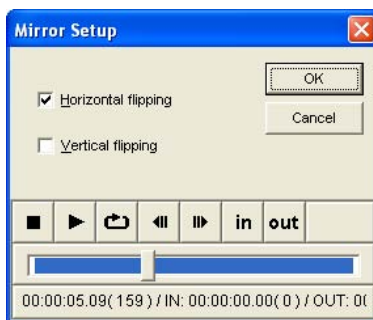
A filter matrix is a mathematical calculation done on the video pixels. Enter the filter matrix values into the boxes.

Check the **Normalize** box to normalize the filter matrix before application.

Explanation of filter matrixes is beyond the scope of this manual, however, there are a number of presets in the Matrix filter that you can start with.

Mirror

Mirror filter allows you to flip the image horizontally and/or vertically.



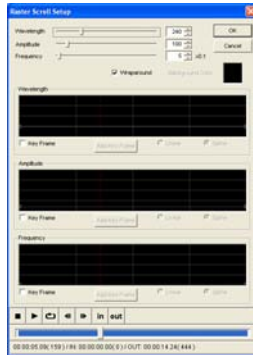
Mirror Setup

Checking the **Horizontal flipping** button will make the image flip horizontally, while the **Vertical flipping** button vertically.

Raster Scroll

RasterScroll filter allows you to apply wavelike deformation to the picture.

With this filter, you can make the video as if its frequency is asynchronous.



Raster Scroll Setup

Wavelength specifies the vertical size of the wave. The greater the value, the longer the wavelength will be.

Amplitude specifies the amount of wave. The greater the value, the bigger the wave will be.

Frequency specifies the frequency of the wave.

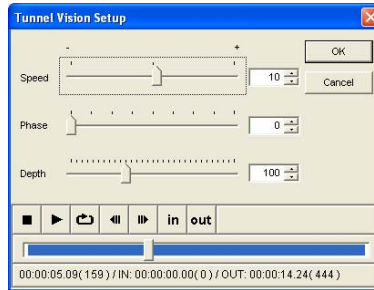
Set **key frames** if you want to wavelength, frequency, and amplitude to change from moment to moment.

Check **Wraparound** to have the wave deformed picture displayed continuously across the whole screen. If Wraparound is not checked, the troughs between the waves are displayed in a monochrome color. Click the Background button to open the Color Select dialog and select a color for the background.

But note that this filter does not affect on the moving path of the Region filter.

Tunnel Vision

TunnelVision filter provides an effect like being in a tunnel.

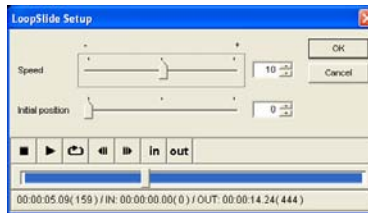


Tunnel Vision Setup

Set the **Speed**, the **Phase** (the initial position of the picture) and the **Depth**.

LoopSlide

The LoopSlide filter slides the left, right of the picture so that they appear to be connected.



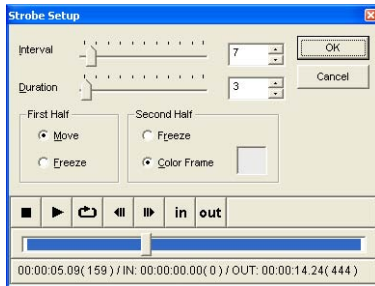
LoopSlide Setup

Drag the sliders to set the speed and the initial position.

Note that this filter does not affect on the moving path of the Region filter.

Strobe

Strobe filter gives an effect like a strobe light flashing.



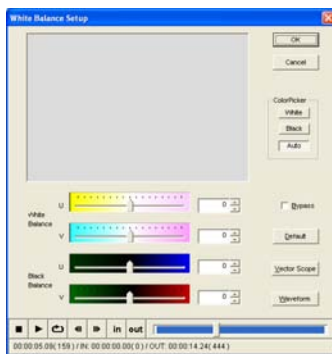
Strobe Setup

Set the amount of time between flashes with the Interval slider, and set the duration of each flash with the Duration slider.

You can select the flash type by choosing one of four combinations: Move and Freeze, Move and Color Frame, Freeze and Freeze, and Freeze and Color Frame. The color frame color can be freely selected.

White Balance

White Balance filter adjusts white balance and black balance.



White Balance Setup

Use the U and V sliders or their input boxes to set the basic colors for white and black.

Bypass removes the effect of the filter without removing the filter itself. Use this box to switch back and forth between the original and filtered video.

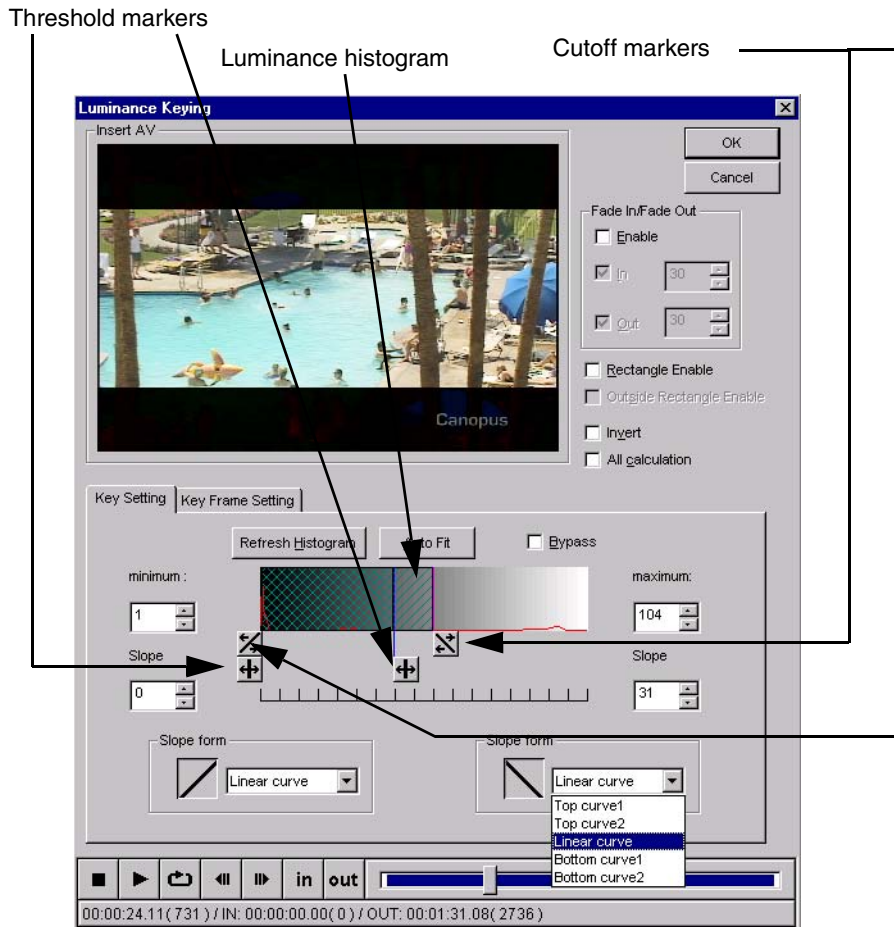
Default returns the settings to their default value.

Chapter 5 : Video Filter Settings

Luminance key

Luminance key (commonly referred to as “Luma key”) allows you to make parts of the video transparent. Luma keying can be used to superimpose moving or static video over another video clip.

Luminance key is only available to clips on the Insert AV line.



Luminance key dialog - Key Setting

General Options

Fade In/Fade Out specifies that the luma-keyed video should fade in and/or out (over the Main AV video). To enable Fade In and/or Fade Out, check the **Enable** box, then check **In** and/or **Out** and specify the number of frames the Fade In or Out should last. **Fade In/Fade Out** cannot be used simultaneously with **Key Framing**.

Rectangle Enable allows you to define a rectangular region of the video to restrict the Luminance Key to an area. To use **Rectangle Enable**, check the **Rectangle Enable** box and use the mouse to position and size the rectangle over the video image.

Outside Rectangle Enable is valid only when **Rectangle Enable** is checked. **Outside Rectangle Enable** will have the Insert AV video outside of the rectangle appear over the Main AV video. Keyframing and Fade In/ Fade Out still applies to the area outside the rectangle, but the defined luminance key will not be applied outside of the rectangle.

Invert will swap the Main AV video and Insert AV video. The luminance key is still based on the Insert AV video.

All calculation forces the luma key to use full calculation. While this can provide a higher quality key, it requires more CPU power.

Setting up the luminance key

Click the **Key Setting** tab to get to the luminance key settings.

The **Luminance histogram** charts the luminance values of the current frame.

The **Refresh histogram** button will refresh the histogram if you scrub to another video frame.

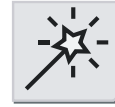
The **Auto Fit** button will try to automatically adjust key settings for you. The accuracy of Auto Fit will depend on the content of your video.



The **Slope Threshold** sliders define the minimum and maximum luminance values to fully remove. To set them, click and drag the sliders to the desired points on the luminance graph. You can also type values in to the **Minimum** and **Maximum** boxes to the left and right of the graph.



The **Slope Cutoff** sliders define the minimum and maximum luminance values to partially remove. Between the Threshold and cutoff values, the amount of removal varies. To set them, click and drag the sliders to the desired points on the luminance graph. You can also type values in to the **Slope** boxes under the **Minimum** and **Maximum** boxes.



Tips

You can use the Fade In/ Fade Out effect of Luminance key to fade between Insert AV and Main AV.

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Tips

Luminance keying takes practice. Spend some time practicing with various video clips until you feel comfortable with what the settings do.

Slope form defines the type of interpolation done between the slope threshold and cutoff values. There are five different slope types - **Top curve 1**, **Top curve 2**, **Linear curve**, **Bottom curve 1**, and **Bottom curve 2**. Experiment with the curve types to obtain the best keying.

Key Frame Setting

Click **Enable** in the **Key Frame Setting** tab to key frame the luminance key. Key framing and Fade In/Fade Out cannot both be used simultaneously.

Key frames in luminance key control the transparency of the keyed video. The top of the graph represents luma keyed video fully visible, while the bottom of the graph represents no luma keyed video visible. The left and right sides of the graph represent the beginning and end of the clip.

Adding and removing key frames

To add a key frame, click a point on the line and drag it to your desired position.

To delete a key frame, right-click on it.

Two methods of keyframe interpolation are available - linear, and curve.

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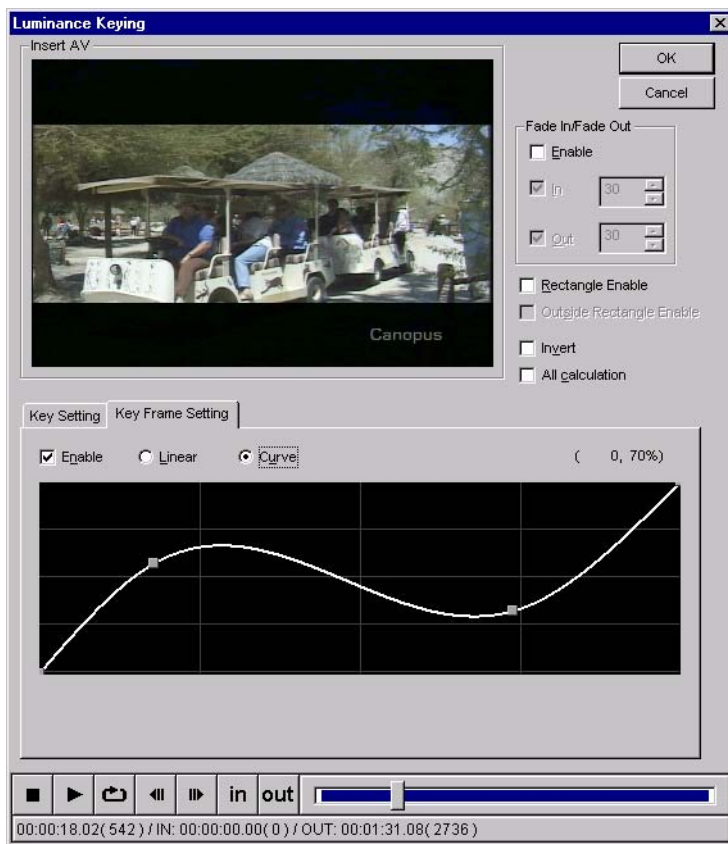
Linear produces a linear interpolation, so changes appear quickly.



Luminance key dialog - Key Frame Setting Linear interpolation

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Curve produces a sine interpolation, so changes appear more gradually.

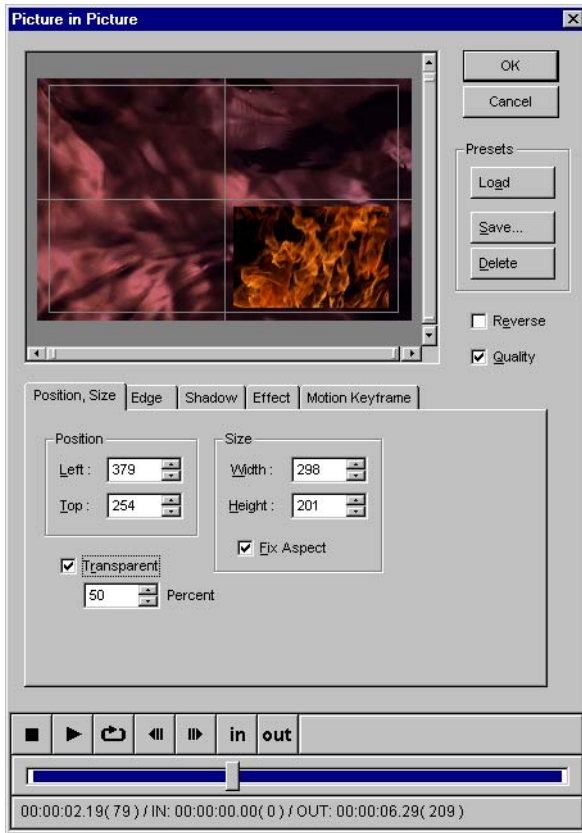


Luminance key dialog - Key Frame Setting Curve interpolation

The numbers at the above and to the right of the graph represent the frame number of the clip and the percent visibility of the keyed video.

Picture-in-Picture

Picture-in-Picture (often abbreviated P-in-P) puts video in a reduced size over another video. Picture-in-Picture works for both Main AV and Insert AV clips.



Picture-in-Picture dialog - Position, Size

General Options

Reverse swaps the P-in-P video with the background video.

Quality sets normal or high quality P-in-P. Quality provides better results especially when scaling, but takes more CPU power.

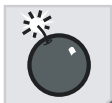
Sizing and Positioning the P-in-P image

Use the mouse to move and scale the Picture-in-Picture image. You can also enter values in the **Left**, **Top**, **Width**, and **Height** boxes on the Position & Size tab if you prefer.

Fix Aspect enables you to scale the P-in-P preserving its aspect ratio. Uncheck this box if you want to non-uniformly size the P-in-P image.

Transparent can make the P-in-P image semi or completely transparent. Check the **Transparent** box and adjust the transparency level in the **Percent** box.

Zooming P-in-P image to full screen



Warning

Before editing the CANOPUS.INI file, make sure to quit Let's EDIT 2.

Also, It's a better to make a copy of the file before editing just in case.



Info

The image may be optimized according to the position of the P-in-P image, causing one line of the screen not displayed.

In the default setting of the Let's EDIT 2, the maximum size of the P-in-P image cannot be zoomed to full screen.

To enable to show the P-in-P image in full screen size, you need to change the application settings as follows.

Add the following three strings in the **CANOPUS.INI** file, which exists in the folder where the **Windows** is installed (Which is normally in C:\Windows). Create the CANOPUS.INI file, in case it doesn't exist in the folder.

```
[PINP]
OverScanX=720
OverScanY=480
```

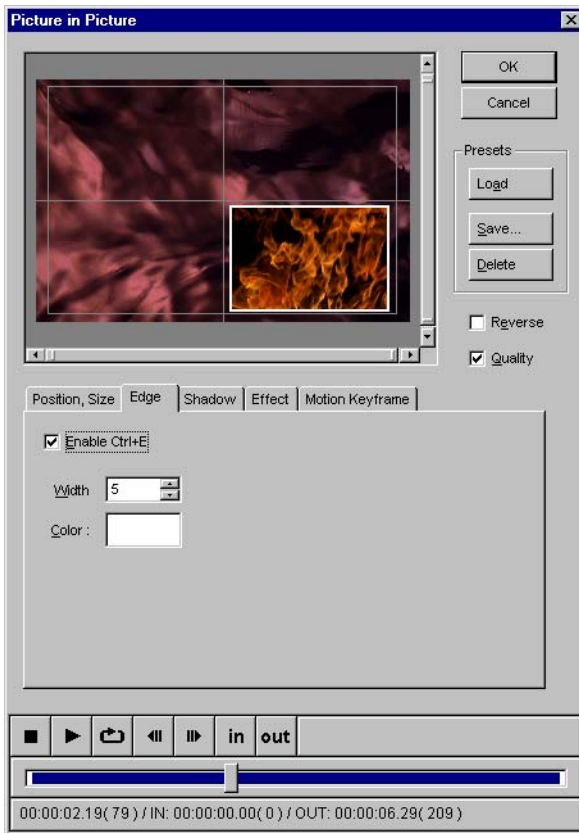
In this example, the maximum size of the P-in-P image will be 720 * 480 pixels.

OverScanX specifies the maximum horizontal size, and can be set between 1- 720.

OverScanY specifies the maximum vertical size, and can be set between 1- 480 for NTSC (and 1- 576 for PAL).

Adding an edge

Click the **Edge** tab to add an edge to the P-in-P image.



Picture-in-Picture Edge settings

Check the **Enable** box to add an edge to the Picture-in-Picture image.

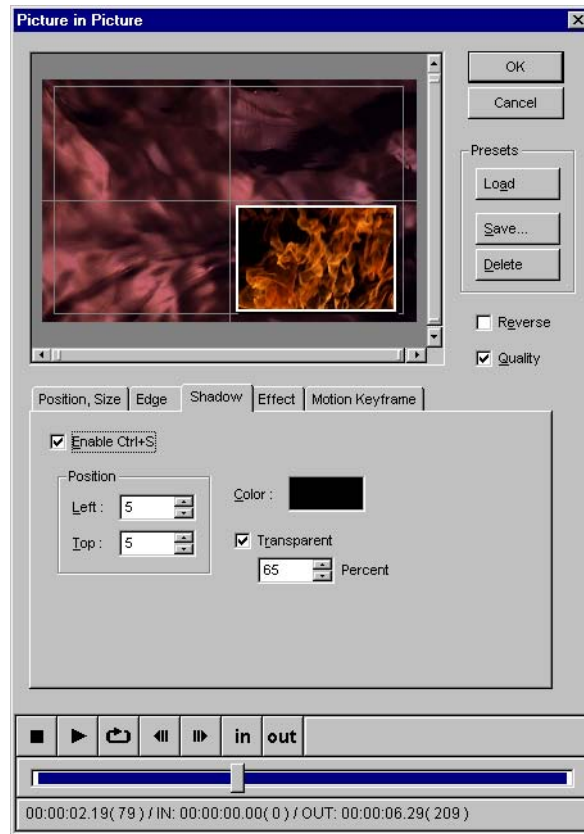
Width determines the width of the edge - the higher the value, the larger the size of the edge.

Color specifies the color of the edge. Click on the box to select a color.

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Adding a shadow

Click the **Shadow** tab to add a shadow to the Picture-in-Picture image.



Picture-in-Picture Shadow settings

Check **Enable** to enable a shadow for the P-in-P image.

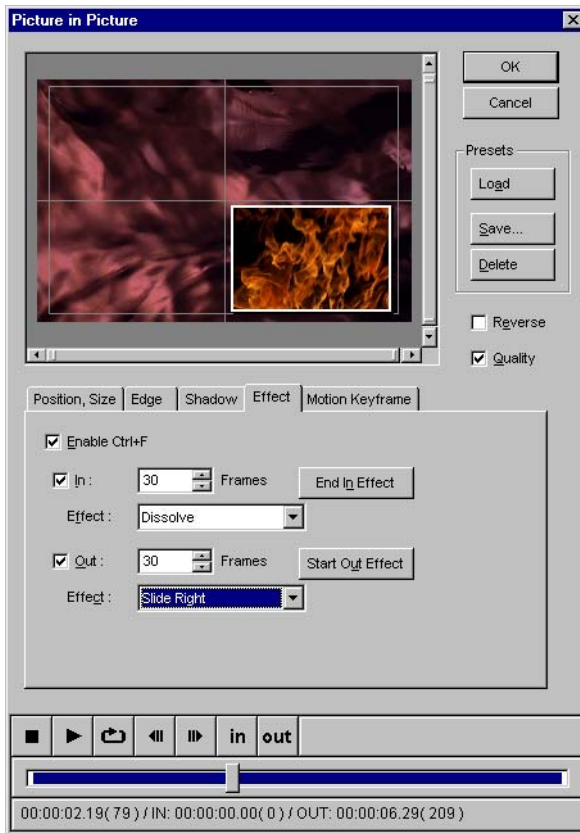
Left and **Top** determine the offset (from the upper-left corner of the image) for the shadow.

Color determines the color of the shadow - click the box to choose a color.

Transparent will make the shadow semi-transparent. Check the **Transparent** box and adjust the transparency in the **Percent** box. The higher the transparency percent, the more subtle the shadow will appear.

Adding in/out effects

Click the **Effect** tab to add an In or Out effect to Picture-in-Picture.



Picture-in-Picture Effect settings

Check the **Enable** box to enable effects for Picture-in-Picture.

To add an In (or Out) effect, check the **In** (or **Out**) box and choose an effect from the **Effect** box.

To adjust the duration of an In (or Out) effect, enter the number of frames in the **Frames** box.

You can also adjust the duration of the In effect by using the filter preview controls to scrub to the frame you want the In effect to end at, and clicking the **End In Effect** button. This will set the number of frames so the In effect ends at the specified frame.

You can also adjust the duration of the Out effect by using the filter preview controls to scrub to the frame you want the Out effect to start at, and



Tips

You can use a full-size Picture-in-Picture and add In and Out effects to transition between Main AV and Insert AV.

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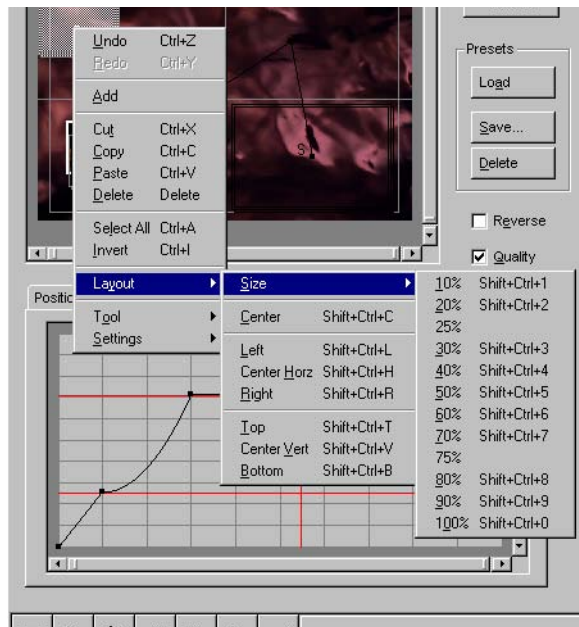
clicking the **Start Out Effect** button. This will set the number of frames so the Out effect starts at the specified frame.

Creating a Motion path

Motion paths allow you to move and scale picture-in-picture videos. You can create motion paths for Picture-in-Picture by defining nodes in the path.

Click the mouse in an empty region of the P-in-P preview window to create a new node. The start (first) node is displayed with a **S** on it, the end (last) node is displayed with a **E** on it.

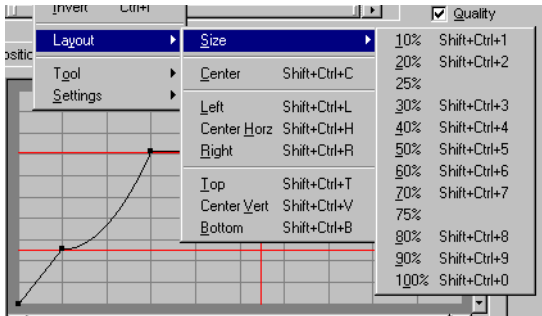
Right-click on a node in the P-in-P preview window to bring up the menu.



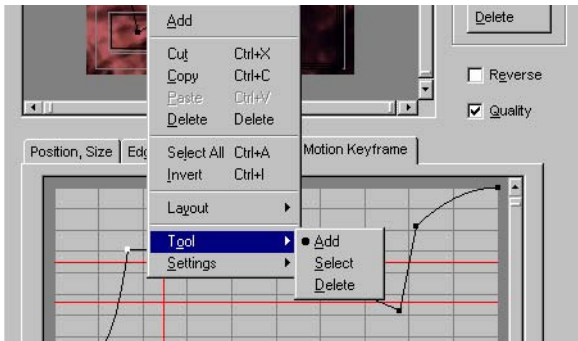
Click **Add** to add a new node to the motion path.

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Use the options in the **Layout** selection to select positioning and size for a node.



The **Tool** selection chooses the action for mouse clicks in the P-in-P preview window.



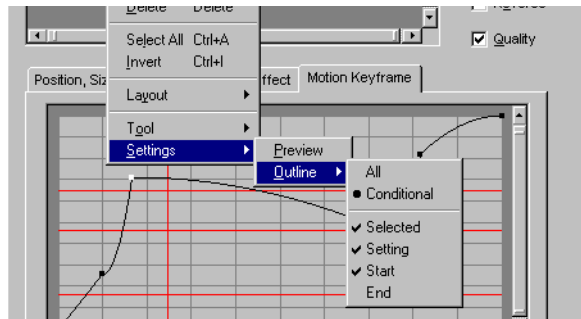
Add specifies that clicking will add a new node in the motion path.

Select specifies that clicking will select a node.

Delete specifies that clicking will delete nodes.

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The **Settings Outline** submenu lets you change which outlines are displayed.



All displays all outlines (nodes and current position)

Conditional displays outlines depending on the selected conditions.

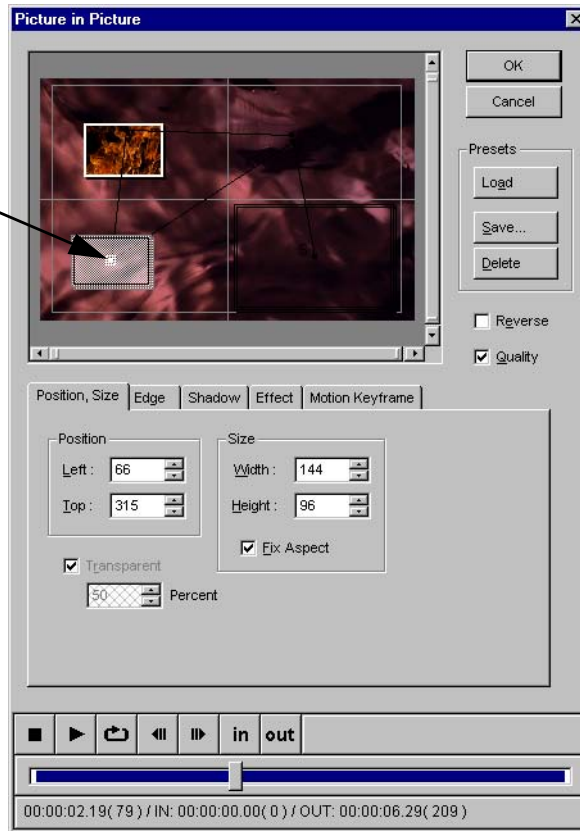
Changing attributes for each node

All P-in-P attributes are preserved with each node, so you can change the size, shadow, or edge as well as the position.

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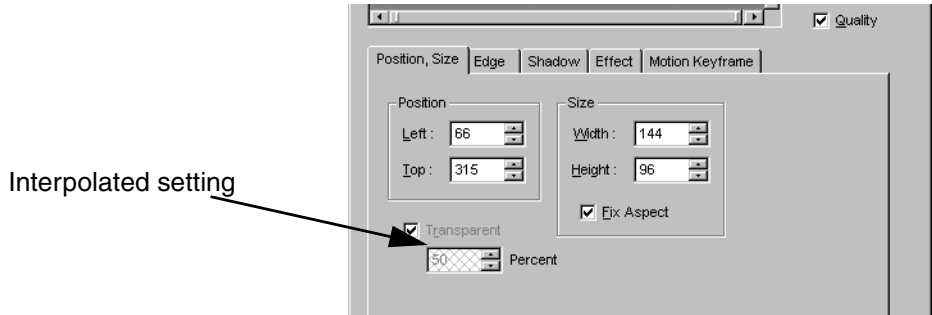
To adjust the settings for a particular node, move the mouse over it so the node is highlighted, then click on it. The attributes for the current node will appear in the tabs, and you can change them.

Selected node



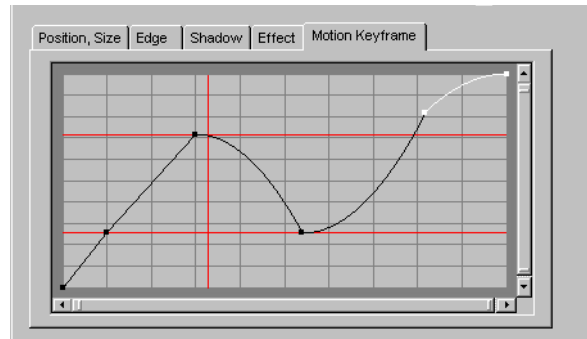
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If a setting is shown gray with hash lines through it, that means the value is being interpolated from the values set for other nodes. To set that value manually, enter a value in the box.



Keyframing motion

To keyframe the P-in-P motion, use the Motion Keyframe tab.



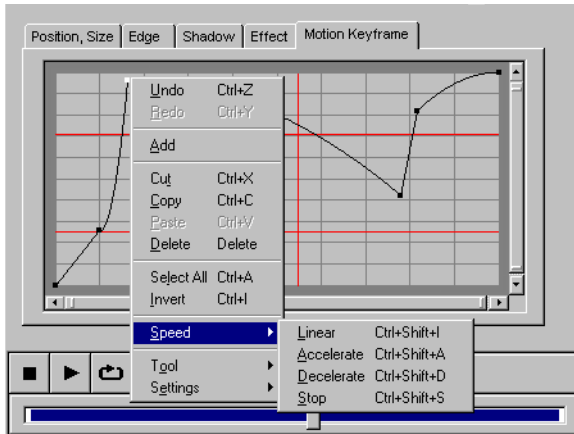
Motion Keyframe tab

The vertical red line represents the current previewed frame. The horizontal red lines represent the defined nodes in the motion path. The black line represents the motion's progress.

The bottom of the graph represents the start position, and the top of the graph represents the end position.

Add nodes to the graph by clicking on the line. To delete a node from the graph, right-click it and choose **Delete** or press the **Del** key on the keyboard.

Right-click the graph to display selection menu.



Add adds a new node to the graph.

Select All will select all nodes in the graph.

Invert will select all the unselected nodes in the graph.

Speed sets the motion speed for the selected segment. Four types of motion between nodes in the graph:

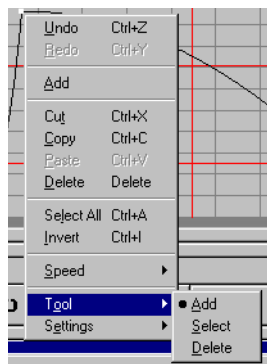
Linear provides linear (straight-line) progress between nodes.

Accelerate provides a slow start but quick finish between nodes.

Decelerate provides a quick start but slow finish between nodes.

Stop holds the motion at the current position until the next node.

Each segment between nodes can have its own speed setting.



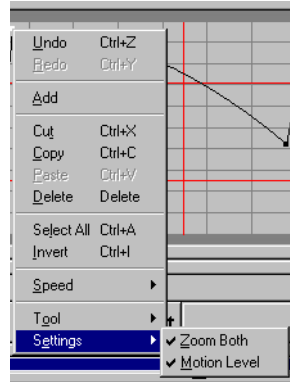
Tool selects the action for left-clicking the graph.

Add specifies that clicking on the graph will add a new node.

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Select specifies that clicking on the graph will select the node or segment.

Delete specifies that clicking on the graph will delete the node or segment.



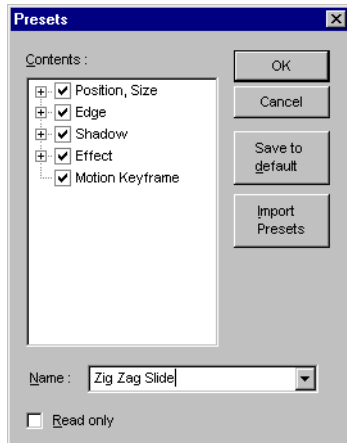
Settings selects the graph settings.

Zoom Both specifies that scrolling the P-in-P layout will also scroll the Motion Keyframe window.

Motion Level shows the motion nodes as red horizontal lines.

Saving presets

You can save your own presets for Picture-in-Picture by clicking on the Save button. A dialog will appear.



Picture-in-Picture Save Presets dialog

You can save some or all of the settings in Picture-in-Picture by selecting items in the **Contents** window. Check an item to select it.

Click the plus-sign next to an item to expand it and see its properties.

Check the properties that you'd like to save, then type a name in the **Name** box. You can also select an existing preset from the **Name** box if you intend to overwrite an existing preset.

Check the **Read-only** box to make the preset read-only. If a preset is read-only, it will not appear in the **Delete** pop-up.

Click **OK** to save your preset.

If you click **Save to default** button, the selected settings will be saved as the Picture-in-Picture default settings.

Loading and deleting presets

You can load or delete existing presets for Picture-in-Picture by clicking on the **Load** or **Delete** buttons and selecting an item from the list that pops up.

Importing Picture-in-Picture presets from other users

The **Import Presets** button on the **Save** dialog allows you to load presets that other people have defined in their PinP.ini file.



Tips

To delete a preset that is read-only, save over it (use the same name). Make sure the new preset is not read-only. Then you can delete the preset.

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To import P-in-P presets from someone else, get their PinP.ini file, and rename it to something else, for example, TanukisPinP.ini

Click the **Import Presets** button and select the .ini file with the presets you want.

If any of the imported presets have the same name as an existing preset, a box that asks whether you want to overwrite the existing preset comes up. If you choose not to overwrite an existing preset, the import will stop.

Using color or colored video as a background



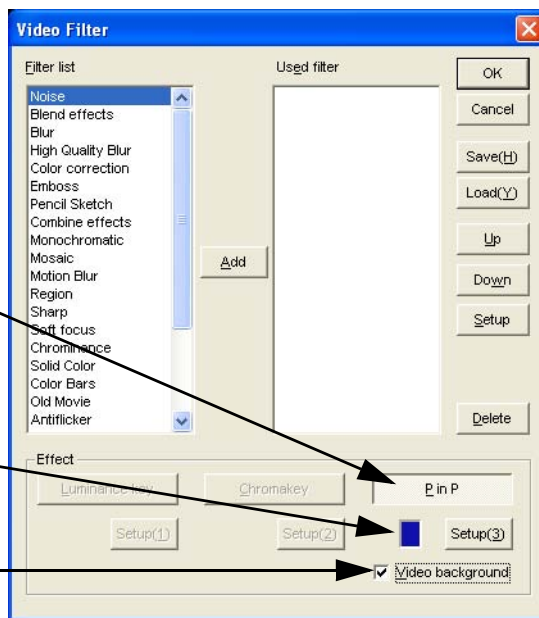
Tips

Use a colored background behind a large Picture-in-Picture to emphasize the video.

Picture-in-Picture Setup

Color box

Video background checkbox



Video filter dialog for Main AV clip

To use a color as the Picture-in-Picture background, click on the color box next to the Picture-in-Picture Setup button and choose a color.

To use colored video as the Picture-in-Picture background, check the **Video background** box.

To have the background video appear as normal (not colored), use white as the background color.

Chromakey

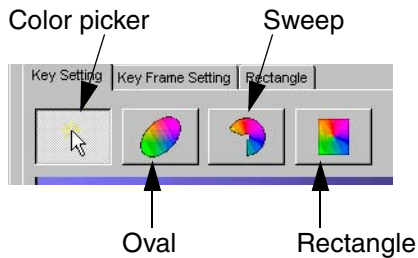
Chromakey allows you to make parts of video transparent. Keyed clips can be placed over other clips to achieve effects such as putting a person in front of the beach or putting them in space.



Chromakey Example

Using the Chromakey involves two steps - creating a key by picking a target color range, and applying filters.

There are four modes to pick the target color for the chrominance filter - Color picker, Oval, Sweep, and Rectangle.



Chapter 5 : Video Filter Settings

Color picker mode



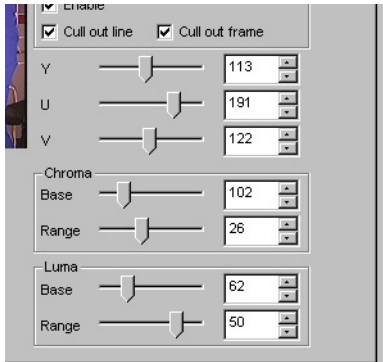
Chromakey - Color picker mode

The color picker mode is the most straightforward way to use Chromakey. In fact, when you first enable Chromakey on a clip, an automatic selection will be made. In many cases, the automatic setting is more than adequate.

Click the cursor in the image to select the key color.

Detailed settings

Click the **Detail** button to display the color details and make fine adjustments.



Detail area (Color Picker mode)

The **Y**, **U**, and **V** sliders adjust the YUV value of the key color.

Chroma **Base** adjusts the range of Chromakeyed out. The larger the value, the wider the base color range.

Chroma **Range** adjusts the amount of color values that are keyed out. The larger the value, the more color is keyed out.

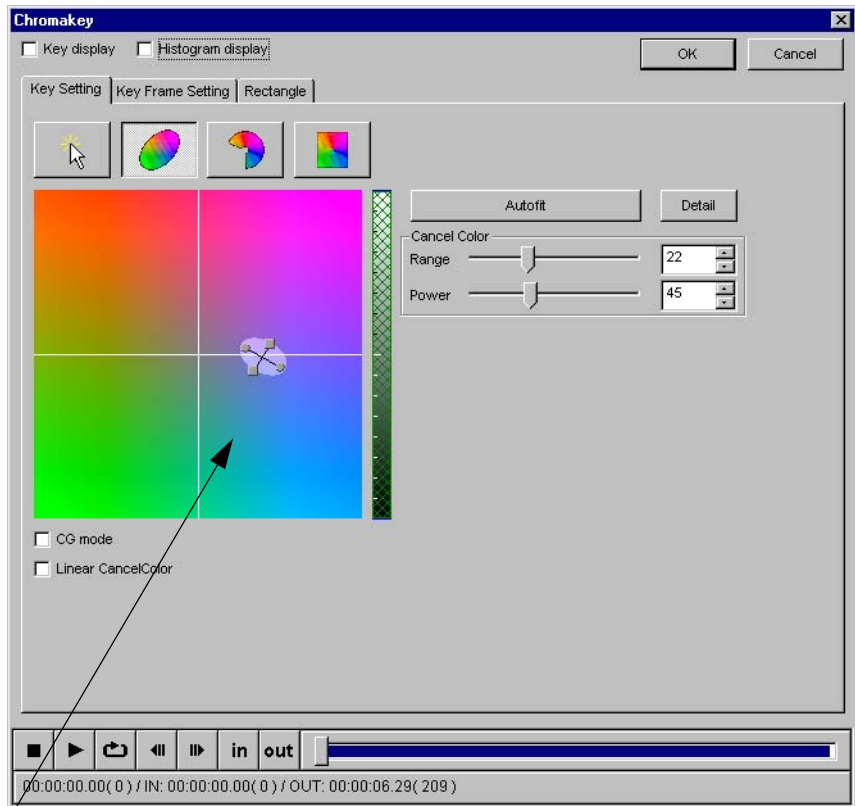
Luma **Base** adjusts the range of luminance keyed out. The larger the value, the wider the base color range.

Luma **Range** adjusts the amount of luminance values that are keyed out. The larger the value, the more luma is keyed out.

Options

Check **Soft edge** to enable blending on the border of the keyed region.

Oval selection mode



Colourspace window

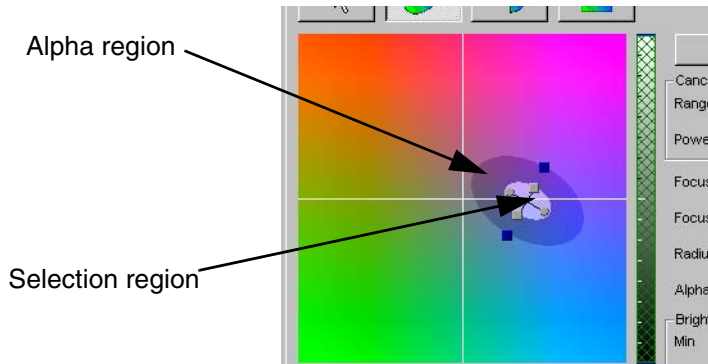
Chromakey (Oval selection mode)

In Oval selection mode, the entire color range is mapped out on the colourspace window.

Move the oval by putting the cursor over it and dragging it.

The light region within the oval specifies the color range to target. The selection region can be resized by clicking and dragging the handles with the cursor. The handles of the selection appear red when the cursor is over them.

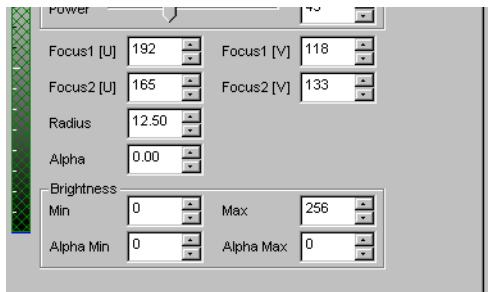
Additionally, an extra alpha range where effects are partially applied can be defined by dragging the blue handles of the selector. The alpha selector handles appear yellow when the cursor is over them. The darker area around the bright oval represents the alpha region.



Oval colorspace picker

Detailed settings

Click the **Detail** button to display the color details and make fine adjustments..



Detail area (Oval selection mode)

Focus 1 and **Focus 2** specify the foci locations for the oval (ellipse) on the U and V axes.

Radius sets the radius of the region of full selection. Within this region, filters will be fully applied.

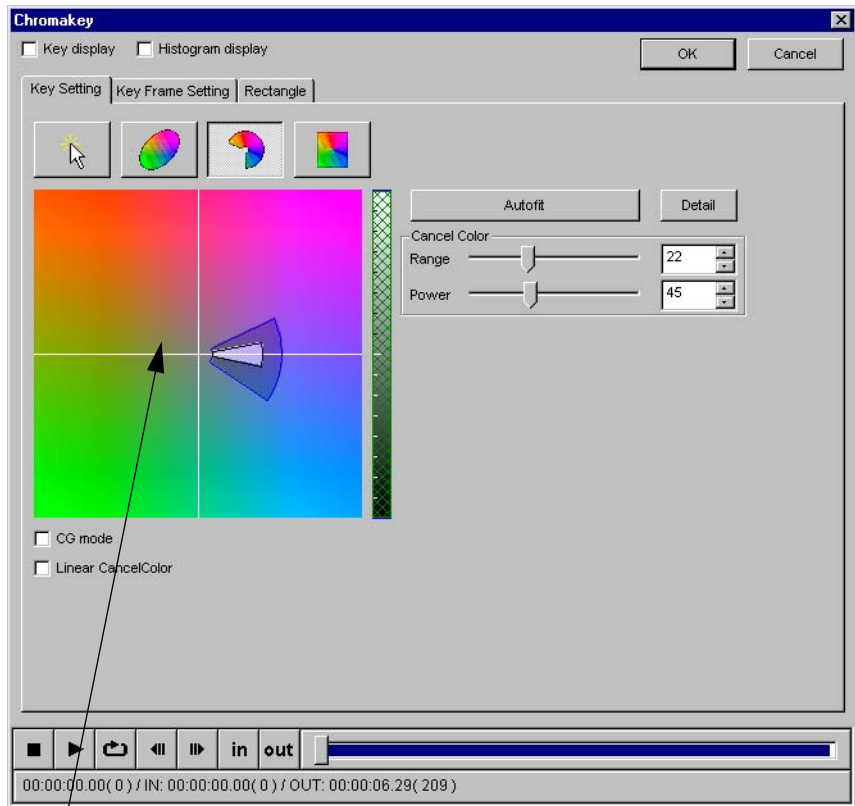
Alpha sets the region beyond the oval where filters will be partially applied.

Brightness Min and **Brightness Max** specify the minimum and maximum luminance values for the fully transparent part of the video.

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Brightness Alpha Min and **Brightness Alpha Max** specify the minimum and maximum luminance values for the semi-transparent part of the video.

Sweep selection mode



Colourspace window Chromakey (Sweep selection mode)

In Sweep selection mode, the entire color range is mapped out on the colourspace window. White is at the center of the window. Sweep selection mode is especially useful when you want to select colors other than white.

Move the orientation of the sweep by putting the cursor over it and dragging it.

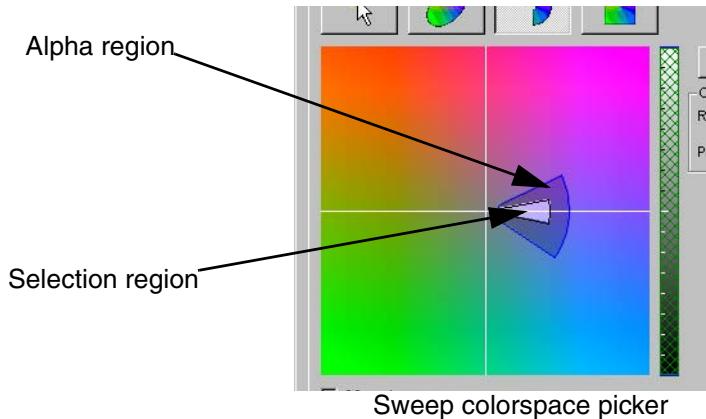
The light region within the sweep specifies the color range to target. The selection region can be expanded or contracted by clicking and dragging the handles with the cursor. The edges of the selection appear red when the cursor is over them.

Additionally, an extra alpha range where effects are partially applied can be defined by dragging the blue edges of the selector. The alpha selector

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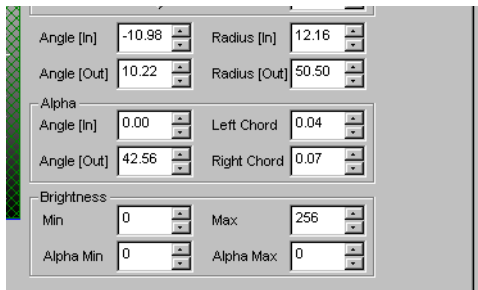
edges appear yellow when the cursor is over them. The darker area around the bright sweep represents the alpha region.

Both the radius and the angle can be changed by dragging the edges of the sweep.



Detailed settings

Click the **Detail** button to display the color details and make fine adjustments.



Detail area (Oval selection mode)

The **Angle (In)** and **Angle (Out)** boxes specify the start and end angles (in -90 to 90 degrees) for the sweep.

The **Radius (In)** and **Radius (Out)** boxes set the start and end radii of the sweep. Colors within this region will be fully transparent.

The **Alpha Angle** boxes set the start and end radii of the region beyond the sweep where filters will partially be applied.

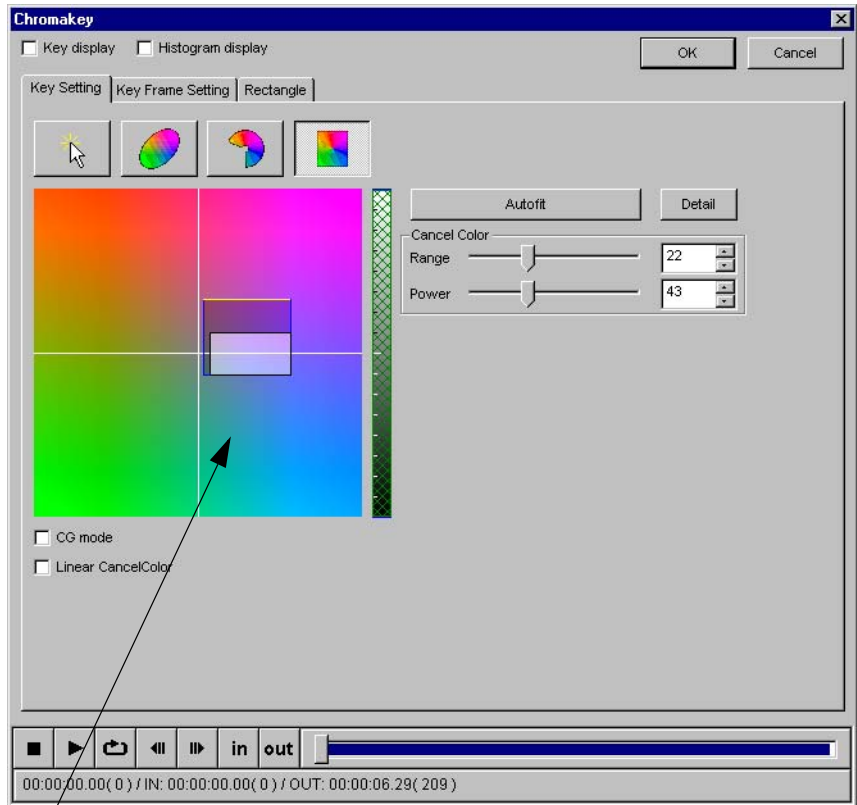
The **Alpha Chord** boxes set the angular region beyond the sweep where filters will be partially applied.

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The **Brightness Min** and **Brightness Max** boxes specify the minimum and maximum luminance values for the fully transparent part of the video.

The **Alpha Min** and **Alpha Max** boxes specify the minimum and maximum ranges for the lower and upper alpha ranges, respectively.

Rectangle selection mode



Chromakey (Rectangle selection mode)

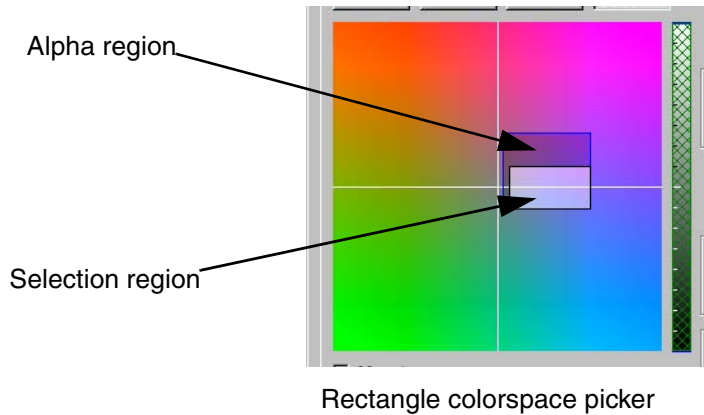
Colorspace window

In Rectangle selection mode, the entire color range is mapped out on the colorspace window.

Move the rectangle by putting the cursor over it and dragging it.

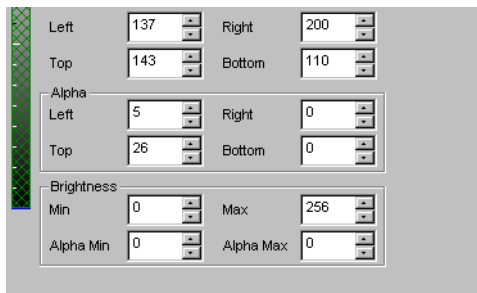
The light region within the rectangle specifies the color range to target. The selection region can be resized by clicking and dragging the handles with the cursor. The edges of the selection appear red when the cursor is over them.

Additionally, an extra alpha range where effects are partially applied can be defined by dragging the blue edges of the selector. The alpha selector edges appear yellow when the cursor is over them. The darker area around the bright rectangle represents the alpha region.



Detailed settings

Click the **Detail** button to display the color details and make fine adjustments.



Detail area (Rectangle selection mode)

Left, **Right**, **Top**, and **Bottom** specify the coordinates of the selection area.

Alpha Left, **Alpha Right**, **Alpha Top**, and **Alpha Bottom** specify the offsets of the alpha region around the selection area.

The **Brightness Min** and **Brightness Max** boxes specify the minimum and maximum luminance values for the fully transparent part of the video.

The **Alpha Min** and **Alpha Max** boxes specify the minimum and maximum ranges for the lower and upper alpha ranges, respectively.

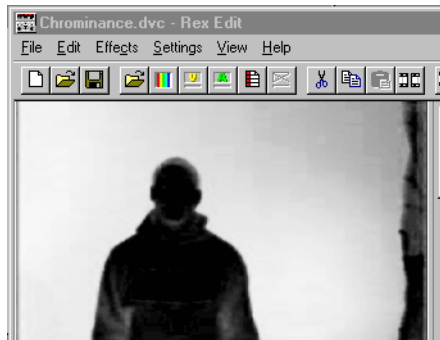
Chapter 5 : Video Filter Settings

General Options (all modes)

Check the **CG mode** box to optimize keying for computer-generated graphics. This is usually not necessary for real-life video.

Check Linear CancelColor to use a linear cancel color adjustment instead of a square adjustment.

Key display (all selection modes)



Key display



Tips

If you leave the key display box selected, you can export the key as an Clip for use as a matte in other programs.

Check the **Key display** box to display the key in the preview instead of the filtered image. Use this mode to easily adjust your color selection.

The black regions represent the transparent area, the gray regions are the partially transparent (alpha) areas, and the white regions are the opaque areas.

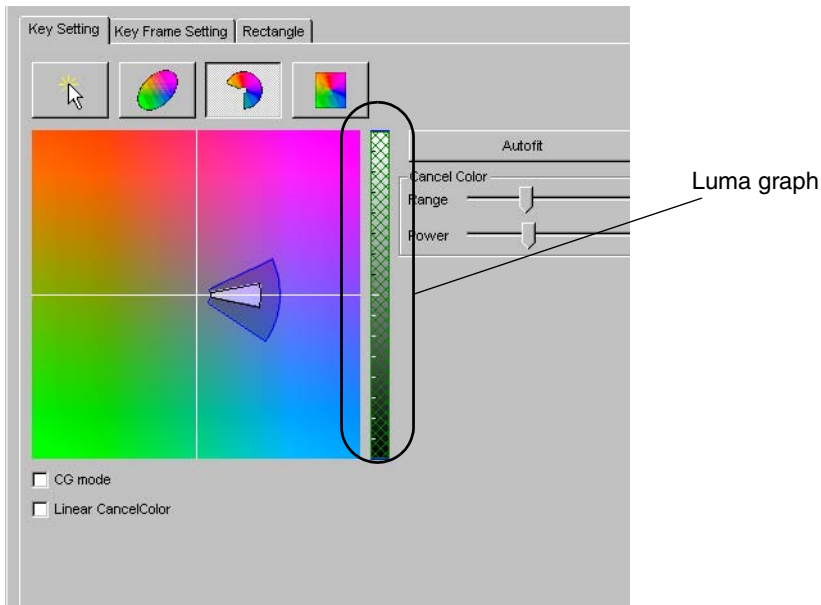
Autofit

Click the **Autofit** button to automatically select the key color.

Advanced Options

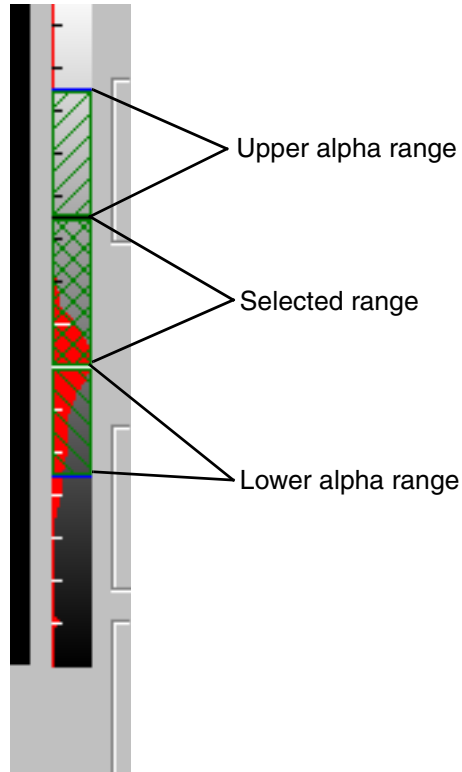
Restricting the target within a Luma range (Oval, Sweep, and Rectangle selection modes)

When using the Oval, Sweep, or Rectangle selections, you can further restrict the target region by using the Luma graph.



Chapter 5 : Video Filter Settings

Use the Luma graph to restrict the target area to a specific luminance range. The luma graph defines three regions - the upper alpha range, the selected range, and the lower alpha range.



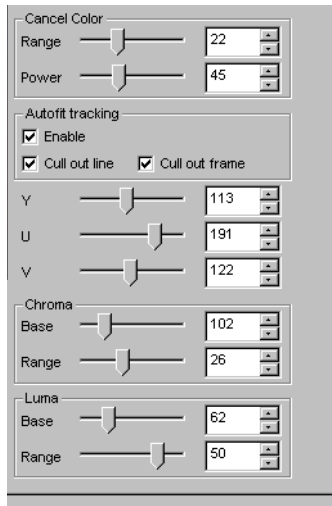
The upper and lower alpha ranges are areas of partial application, while the selected range is fully applied.

To change the upper or lower limit of the upper or lower alpha range, drag the line at the top or bottom of the area. The dividing line will turn yellow when the cursor is over it.

To change the upper or lower limit of the selected range, drag the black line at the top or bottom of the selected range. The dividing line will turn red when the cursor is over it.

Chapter 5 : Video Filter Settings

You can also manually set the luminance ranges in the **Luma** and **Brightness** sections of the Detail area.



Cancel Color
Range [Slider] 22
Power [Slider] 45

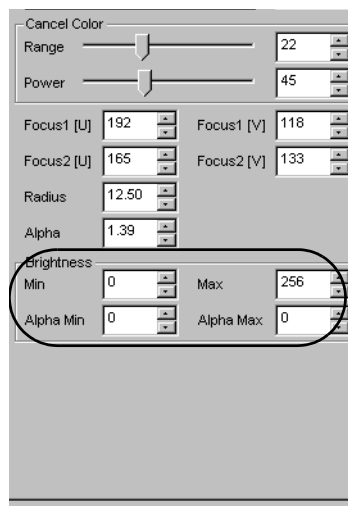
Autofit tracking
☒ Enable
☒ Cull out line ☒ Cull out frame

Y [Slider] 113
U [Slider] 191
V [Slider] 122

Chroma
Base [Slider] 102
Range [Slider] 26

Luma
Base [Slider] 62
Range [Slider] 50

Oval Detail area

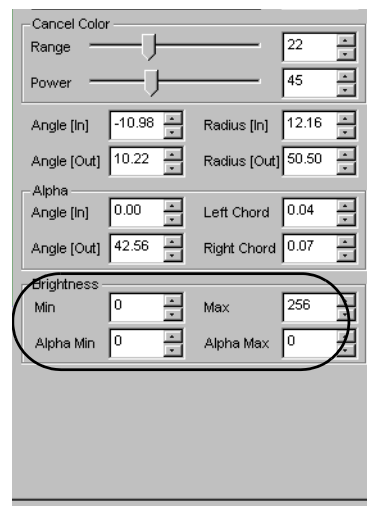


Cancel Color
Range [Slider] 22
Power [Slider] 45

Focus1 [U] 192 Focus1 [V] 118
Focus2 [U] 165 Focus2 [V] 133
Radius 12.50
Alpha 1.39

Brightness
Min 0 Max 256
Alpha Min 0 Alpha Max 0

Sweep Detail Area



Cancel Color
Range [Slider] 22
Power [Slider] 45

Angle [In] -10.98 Radius [In] 12.16
Angle [Out] 10.22 Radius [Out] 50.50

Alpha
Angle [In] 0.00 Left Chord 0.04
Angle [Out] 42.56 Right Chord 0.07

Brightness
Min 0 Max 256
Alpha Min 0 Alpha Max 0

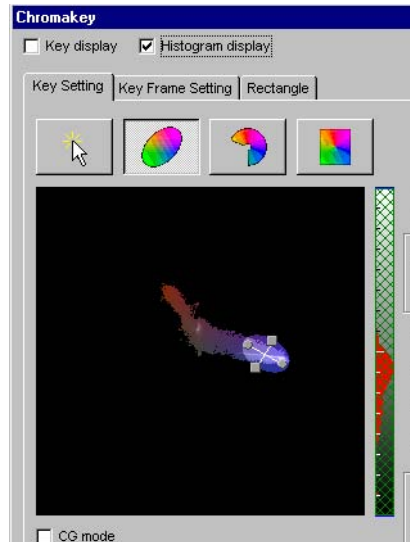
Rectangle Detail Area

Min and **Max** specify the minimum and maximum luminance values where filters will be fully applied.

Alpha Min and **Alpha Max** specify the minimum and maximum ranges for the lower and upper alpha ranges, respectively.

Histogram (Oval, Sweep, and Rectangle selection modes)

Check the **Histogram display** box to display the colors used in the current frame in the colorspace window. This can aid you in selecting the appropriate chroma and luma range.



Histogram display

Autofit tracking

Check the **Enable** box to enable autofit tracking. Autofit tracking allows the system to compensate for small changes in color during the video.

Since tracking takes up a lot of CPU time, two options - **Cull out line** and **Cull out field** are available to increase performance. **Cull out line** will make the tracker skip lines in the analysis. **Cull out field** will make the tracker skip fields in the analysis.

Cancel Color

Cancel Color allows you to apply some color inversion to the outside of the affected area.

Cancel Color is most useful to correct off-color shadows or reflections. For example, an object in front of a green chroma screen may have a muted green shadow. Using Cancel Color, you can neutralize the green and make the shadows appear normal blackish-gray.

Range sets the size of the area corrected.

Power sets the amount of correction applied.

Chapter 5 : Video Filter Settings

For best results, set both **Range** and **Power** to maximum, reduce the **Range** to an acceptable area, then reduce the **Power** until the color is corrected.

Let's EDIT 2

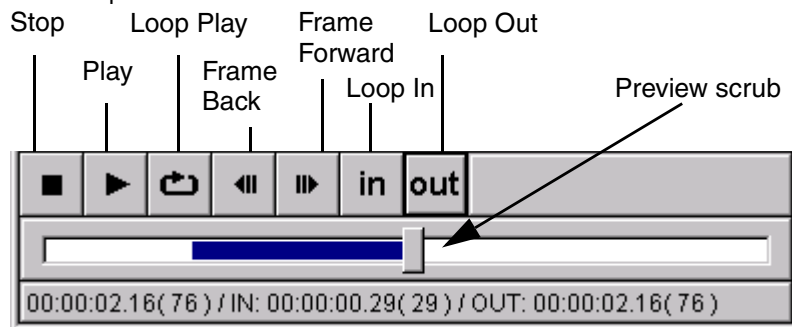
Chapter 6

Audio Filter Settings

This chapter will describe the settings for the Canopus audio filters available in Let's EDIT 2.

Filter Preview controls

All audio filters have preview controls which let you control playback of the filtered clip.



Filter Preview controls



Tips

Use the **in** and **out** buttons to define a segment of the clip. Click

Loop Play to loop playback, then adjust the filter settings while the video is playing.

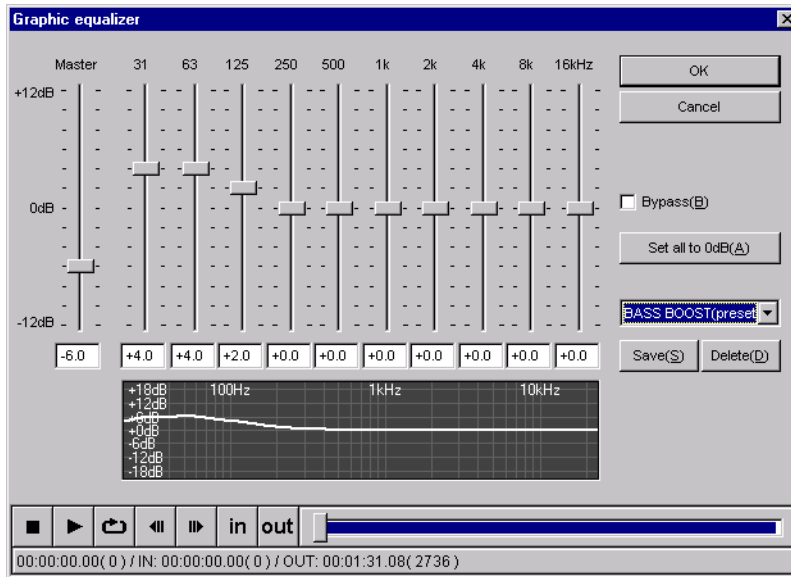
Depending on the length of the loop, it may take a second or two before you hear the result of the filter.

Use the filter controls to start, stop, and loop playback of the filtered clip. You can adjust settings while the clip is playing, however, it may take a second or two before you hear the filter applied.

You can use the **in** and **out** buttons to set in and out points for loop playback.

Graphic equalizer

The Graphic equalizer audio filter lets you adjust the individual frequency ranges of your audio, much like a home stereo equalizer.



Graphic equalizer dialog

Adjusting the levels of different frequency ranges

Make adjustments to each frequency range by moving the slider, or enter a positive or negative value (in dB) in the box below the range you wish to modify.

The graph at the bottom of the window shows a graphic representation of the volume change.

Click the **Set all to 0dB** button to return all sliders to 0dB.

Check the **Bypass** box to turn the filtering off. You can use **Bypass** to quickly check the difference between with and without the filter applied.

Saving, loading, and deleting settings

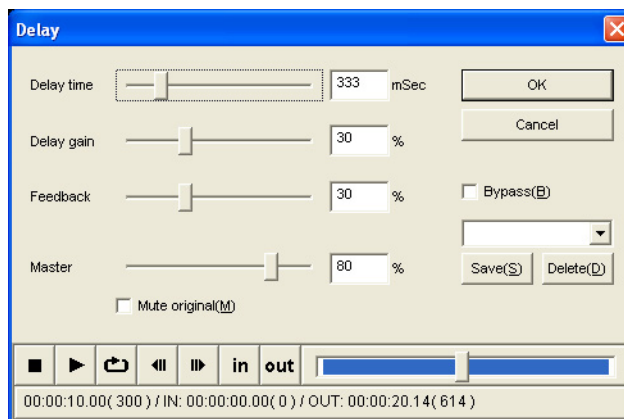
You can save a custom setting by clicking the **Save** button and naming the setting.

You can load a custom setting by choosing it from the pop-up list above the **Save** and **Delete** buttons.

Delete a custom setting by choosing it from the list, then clicking the **Delete** button. A confirmation will appear to confirm the deletion. Clicking **Yes** will delete the preset, clicking **No** will cancel the deletion.

Delay

The Delay audio filter can be used to add echo or just delay the audio.



Delay filter dialog

Delay time specifies the amount of time the audio is delayed, in milliseconds.

Delay gain determines the relative volume level of the delayed audio. 100% gain is the same volume level as the original audio.

Feedback controls the amount of echo feedback. The higher the feedback level, the longer the echo will last.

Master controls the master volume level. Since delay can often cause the audio to sound louder, use **Master** to reduce the volume to compensate.

Check the **Mute original** box to mute the original audio. When the original audio is muted, only the audio the delay filter generates will be heard.

Check the **Bypass** box to turn the filtering off. You can use **Bypass** to quickly check the difference between with and without the filter applied.

Saving, loading, and deleting settings

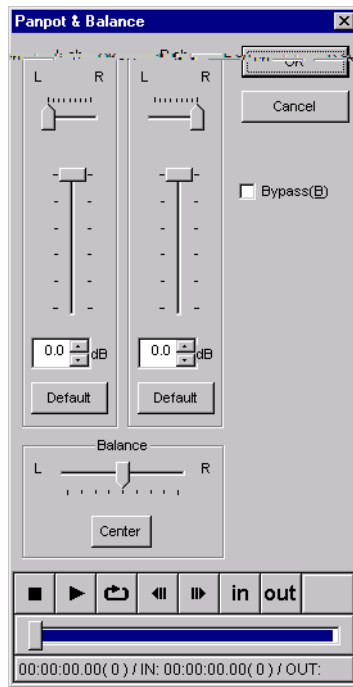
You can save a custom setting by clicking the **Save** button and naming the setting.

You can load a custom setting by choosing it from the pop-up list above the **Save** and **Delete** buttons.

Delete a custom setting by choosing it from the list, then clicking the **Delete** button. A confirmation will appear to confirm the deletion. Clicking **Yes** will delete the preset, clicking **No** will cancel the deletion.

Panpot & Balance

The Panpot & Balance audio filter allows you to pan channels from side to side, adjust the volumes of each channel, and change the balance of the output.



Panpot & Balance filter dialog

The horizontal **L-R** sliders allow you to pan each channel's audio from between left and right.

The vertical **Volume** sliders allow you to reduce the volume of the left and right channels.

The **Default** button will return the channel to its default settings.

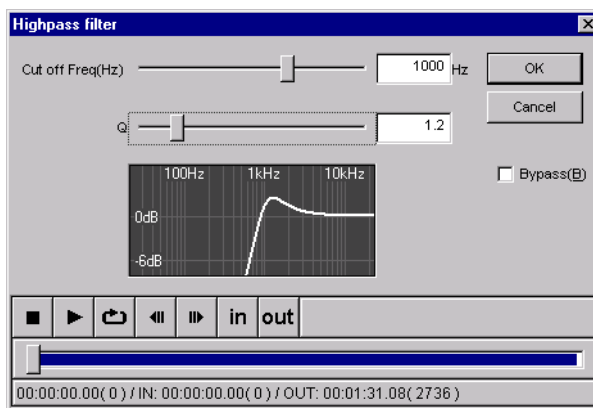
The **Balance** slider determines how much of each channel is present on output.

Click the **Center** button to return the **Balance** slider to its normal center position.

Check the **Bypass** box to turn the filtering off. You can use **Bypass** to quickly check the difference between with and without the filter applied.

High-pass filter

The high-pass audio filter restricts audio to higher frequencies.



High-pass filter dialog

Cutoff frequency defines the lower frequency bound for the filter. Any frequency below the cutoff frequency is completely muted.

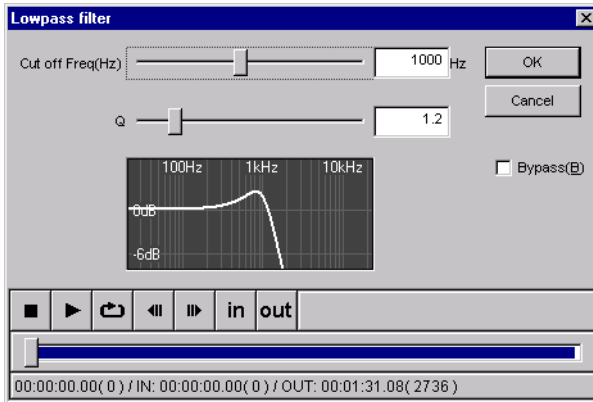
Q determines how much amplification is applied to frequencies near the cutoff. The larger the Q value, the more amplification is applied to the frequencies approaching the cutoff.

The graph at the bottom of the window provides a visual representation of the audio amplification by frequency

Check the **Bypass** box to turn the filtering off. You can use **Bypass** to quickly check the difference between with and without the filter applied.

Low-pass filter

The low-pass audio filter restricts audio to lower frequencies.



Low-pass filter dialog

Cutoff frequency defines the upper frequency bound for the filter. Any frequency above the cutoff frequency is completely muted.

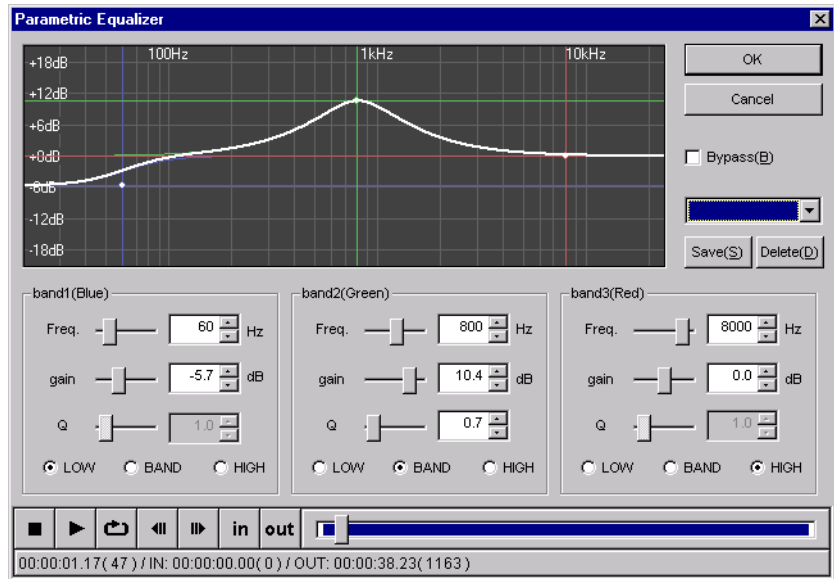
Q determines how much amplification is applied to frequencies near the cutoff. The larger the Q value, the more amplification is applied to the frequencies approaching the cutoff.

The graph at the bottom of the window provides a visual representation of the audio amplification by frequency

Check the **Bypass** box to turn the filtering off. You can use **Bypass** to quickly check the difference between with and without the filter applied.

Parametric equalizer

The parametric equalizer audio filter gives you full control of volume levels with three bands.



Parametric equalizer filter dialog

The parametric equalizer has three adjustment bands.

The **Freq.** slider determines the frequency midpoint of the band.

The **gain** slider determines the gain adjustment for the band.

You can adjust the frequency and gain for a band simultaneously by using the mouse to move the dot in the graph.

The **Q** value determines how quickly the gain adjustment occurs - the higher the Q value, the more rapidly the gain change occurs.

Low, **Band**, and **High** determine the frequency range the band applies to.

Check the **Bypass** box to turn the filtering off. You can use **Bypass** to quickly check the difference between with and without the filter applied.

Saving, loading, and deleting settings

You can save a custom setting by clicking the **Save** button and naming the setting.

You can load a custom setting by choosing it from the pop-up list above the **Save** and **Delete** buttons.

Delete a custom setting by choosing it from the list, then clicking the **Delete** button. A confirmation will appear to confirm the deletion. Clicking **Yes** will delete the preset, clicking **No** will cancel the deletion.

Tone controller

The tone controller audio filter adjusts the high and low frequency gain.



Tone controller audio filter

Adjust the low and high gain by dragging the sliders, entering a dB value in the boxes below the sliders, or by using the mouse to move the points in the graph.

Check the **Bypass** box to turn the filtering off. You can use **Bypass** to quickly check the difference between with and without the filter applied.

Saving, loading, and deleting settings

You can save a custom setting by clicking the **Save** button and naming the setting.

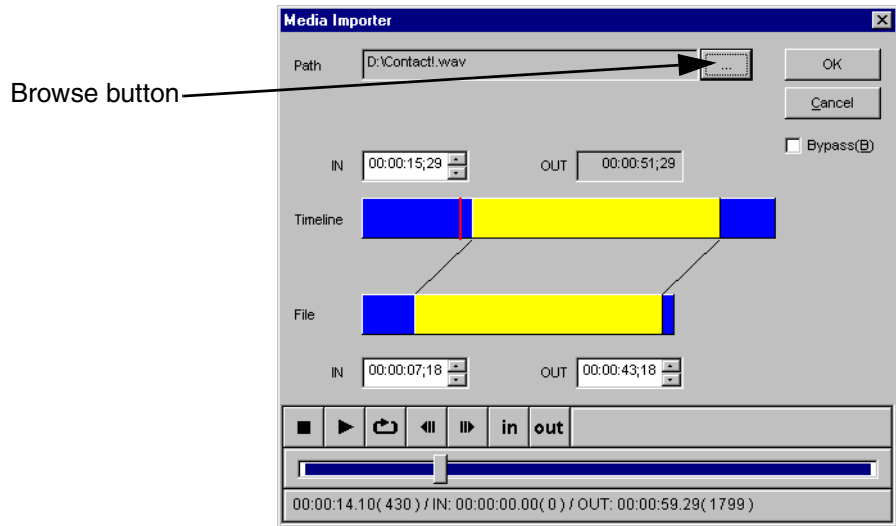
You can load a custom setting by choosing it from the pop-up list above the **Save** and **Delete** buttons.

Chapter 6 : Audio Filter Settings

Delete a custom setting by choosing it from the list, then clicking the **Delete** button. A confirmation will appear to confirm the deletion. Clicking **Yes** will delete the preset, clicking **No** will cancel the deletion.

Media Importer

The media importer audio filter lets you replace the audio of a clip in the timeline with audio from another file.



Media Importer audio filter

Choose a file to get audio from by clicking the browse (...) button.

Media Importer can get audio from the following types of files:

- > Uncompressed PCM WAV files (*.WAV)
- > MPEG-1 Layer 3 audio files (*.MP3)
- > AIFF (*.AIF)
- > Video for Windows (*.AVI)
- > QuickTime (*.mov, *.qt)
- > MPEG-1 (*.mpg)

Audio must be DV-safe, 32 KHz 12-bit, 32 KHz 16-bit, 44.1 KHz 16-bit, or 48 KHz 16-bit.

The yellow area on the Timeline display maps to the yellow area on the File display.

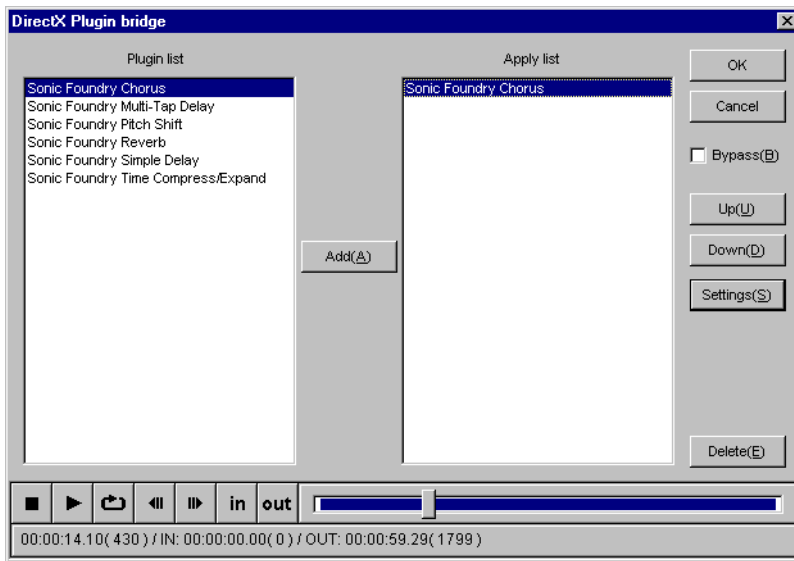
Use the **IN** box above the Timeline clip display to adjust the start position of the imported audio. You can also drag the yellow section along the Timeline clip display.

Use the **IN** and **OUT** boxes below the File display to adjust the section to import from the file. You can also drag the yellow section along the File clip display to move it, and drag the ends to change the In and Out points.

Check the **Bypass** box to turn the filtering off. You can use **Bypass** to quickly check the difference between with and without the filter applied.

DirectX Plugin Bridge

The DirectX plugin bridge filter allows you to use DirectX audio filters, such as those available from Sonic Foundry.



DirectX Plugin Bridge audio filter

The list of available DirectX audio filters appears on the left.

Double-click on a filter name, or select it and click **Add** to add it to the list of used filters on the right.

To remove a filter from the current clip, select it and click **Delete**.

To access the settings for a particular filter, double-click it, or select it and click the **Setup** button. The filter settings (if any) will appear on screen.

The settings that are displayed will vary from plugin to plugin. Please consult the documentation for your installed DirectX audio filters for information on individual filters.

DirectX audio filters are applied in the order they appear in the list - to change the order that filters are applied, select a filter from the list of used filters and click the **Up** and **Down** buttons to reposition it in the list. For

Chapter 6 : Audio Filter Settings

example, if you apply Reverb then Pitch shift, the result could be different from applying Pitch shift, then Reverb.

Keep in mind that in order to preview the filter, you need to use the playback controls on the DirectX Plugin Bridge window.

Let's EDIT 2

Chapter 7

Techniques

This Guide

This guide provides techniques you can use in your productions. Once you have understanding these techniques you will have enough background to use the extended feature set of your system. We recommend you practice with the tools used in this section.

You can get more tips and techniques at the Canopus Website and User groups located at: <http://www.canopus.com/>

Techniques

There are many techniques explained in this chapter, they include:

Letter-Box—Adding a black letter-box effect to standard 4:3 video. (page 295)

Scaled Picture-in-Picture/ Mosaic—Creating a scaled, floating video panel. (page 297)

Picture-in-Picture Zoom—Animating a picture-in-picture video window. (page 299)

3 Picture-in-Pictures—Creating 3 live video windows. (page 302)

Keyed title (animated)—Keying and animating a title. (page 305)

Keyed/Animated Logo—Keying and animating a logo. (page 308)

Reverse Key—Reverse keying a title. (page 309)

Keyed Sparkle—Adding a sparkle to a necklace using luminance keying. (page 312)

Simple Lens Flare—Adding a lens flare using luminance keying. (page 312)

Animated Mosaic—Concealing a face using an animated mosaic. (page 313)

Motion Blur—Adding motion blur. (page 315)

Animated Bitmaps—Animating clip art. (page 316)

Multiple Animated Titles—Animating multiple title tracks. (page 319)

Multiple Animated Titles with Motion Blur—Adding motion blur to titles. (page 321)

Simulated DEA Drug Take-down—Using colorization with an animated region. (page 322)

Letter-box

In this example the **Region** filter is used to provide a "letter-box" effect with standard 4:3 aspect video. This effect provides the illusion of "wide-screen".



Setting up the region

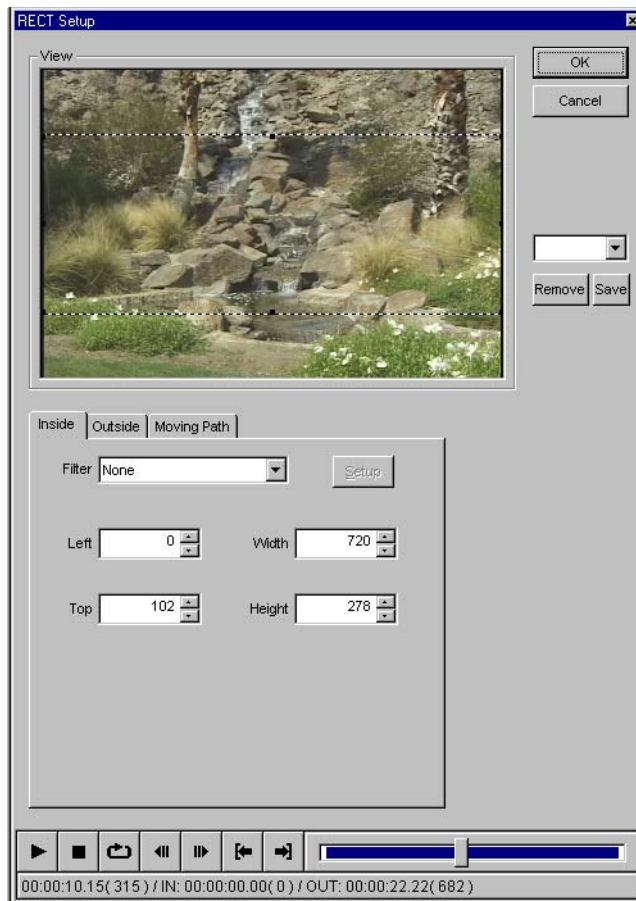
STEP 1: Drag a video clip into MainAV.

STEP 2: Right-click on MainAV and double click **Region** in the Video filters dialog.

STEP 3: In the dimensions entry boxes add, *Left:0, Top:102, Width: 720, Height:278*.

Chapter 7 : Techniques

STEP 4: Click on the *Outside* tab, click *Setup* and select *Color correction* as the effect.



STEP 5: To make the outside effect 'black' set the *Brightness*, *Contrast*, and *Chroma* to -128 with the Sliders.

Picture-in-Picture over an Effect

In this example a Video clip is displayed in a scaled window over the same clip, with a video effect, in MainAV.



STEP 1: Drag a video clip into the MainAV timeline.

STEP 2: Right-click on the MainAV timeline and select *Video Filter*.

STEP 3: When the *Video Filters* dialog opens double-click on *Mosaic*. Click *OK*.

STEP 4: Drag a copy of the same video clip into InsertAV.

STEP 5: Right-click on the InsertAV timeline and select *Video Filter*.

STEP 6: When the *Video Filters* dialog opens click on *P-in-P*.

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Same video footage

Mosaic effect

P-in-P effect



Tips

Both the P-in-P and Mosaic effects can be adjusted. The example above uses the default settings.

Picture-in Picture with Zoom

In this example a P-in-P window dissolves onto the background video and scales to full screen. After the video is displayed it then scales into the center of the screen and disappears.



Placing the P-in-P window

STEP 1: Drag a clip into the MainAV timeline.

STEP 2: Drag another clip into the InsertAV timeline.

STEP 3: Right-click on the InsertAV timeline and select *Video Filter*.

STEP 4: When the *Video Filters* dialog opens click on *P-in-P* and select *Setup*.

STEP 5: Drag the video window to the top left of the screen.

STEP 6: Click *OK*.

Add Zoom-in effect (segment 1)

STEP 7: Move a third of the way down the InsertAV clip and add a separation.

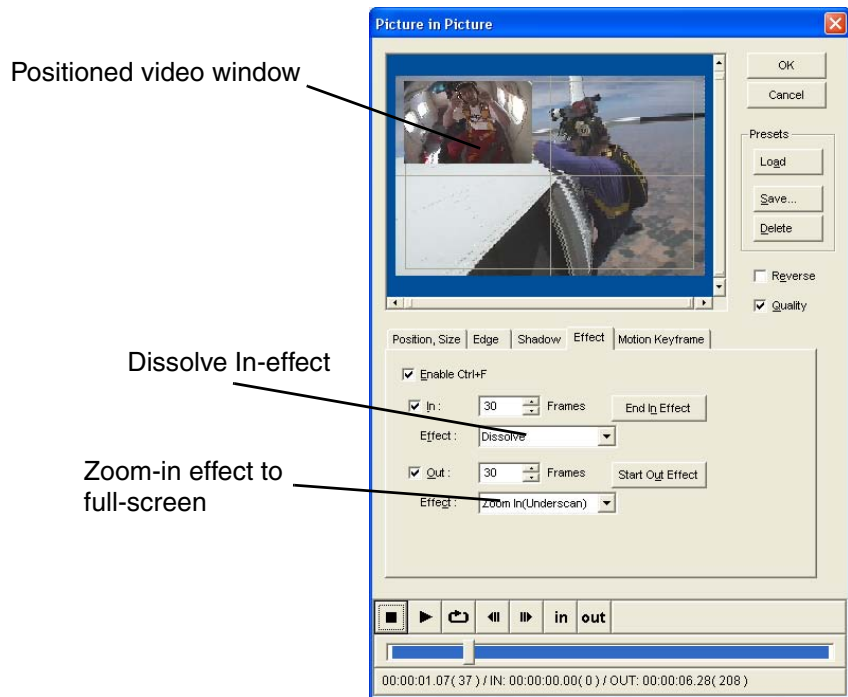
STEP 8: Move further down the InsertAV timeline and add another separation. You should have three segments in the InsertAV timeline.

STEP 9: Right-click on the first segment in the InsertAV timeline and select *Setup* under the *P-in-P* button.

STEP 10: Select the *Effect* tab and click *Enable*.

STEP 11: For the *In-effect* select *Dissolve*.

STEP 12: For the *Out-effect* select *Zoom In (Underscan)*. Click *OK*.



Add full-screen effect (segment 2)

STEP 13: Right-click on the second segment and select *Video Filter*.

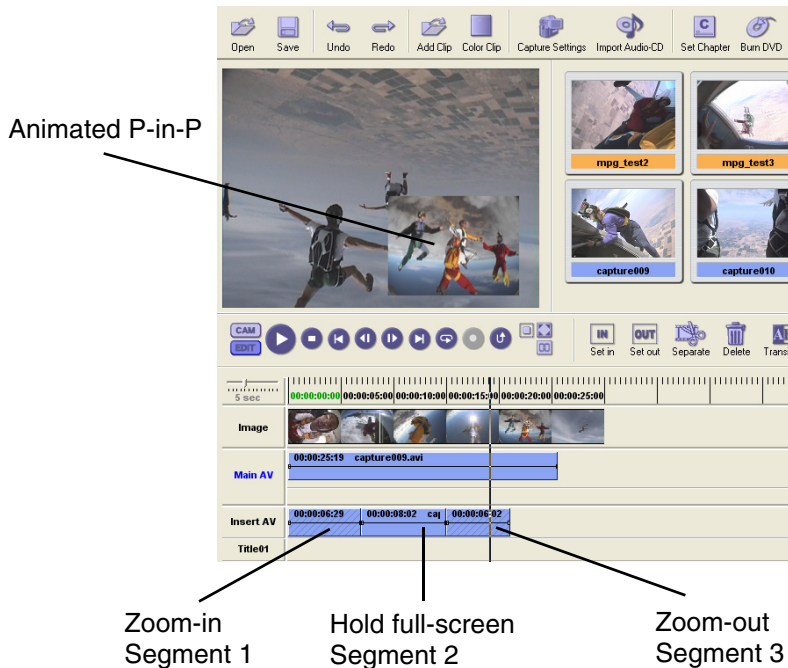
STEP 14: Click the *P-in-P* button to disable *P-in-P*.

Add Zoom-out effect (segment 3)

STEP 15: Right-click on the third segment in the InsertAV timeline and select *Setup* under the *P-in-P* button.

STEP 16: Select the *Effect* tab and click *Enable*.

STEP 17: For the *In* and *Out* effects select *Dissolve*. Click *OK*.



Tips

The In and Out effect settings determine how fast and what effects are used to display and remove a P-in-P window. The speed of the effect can be adjusted by adjusting where the end of the In effect occurs and when the start of the Out effect begins. The above example animates a video window. The same effect can be applied to graphics. You can also combine luminance keying or chroma keying with the P-in-P effect. You can also use Picture-in-Picture motion keyframing to achieve the zoom in/out effect.

Three Picture-in-Pictures

In this example three video windows are on-screen in realtime.



Window #1

STEP 1: Drag a video clip into MainAV.

STEP 2: Right-click on MainAV and select *P-in-P* in the *Video filters* dialog.

STEP 3: Click *Setup* and position the window to the top left of the main video display.

Window #2

STEP 4: Drag a video clip into InsertAV.

STEP 5: Right-click on InsertAV and select *P-in-P* in the *Video filters* dialog.

STEP 6: Click *Setup* and position the window to the bottom right of the main video display.

Window #3

STEP 7: Drag a video clip after your first MainAV clip and add a transition.

STEP 8: Open the *Transition settings* dialog > Click *Custum Setting >* and double-click on *Basic-Stretch*.

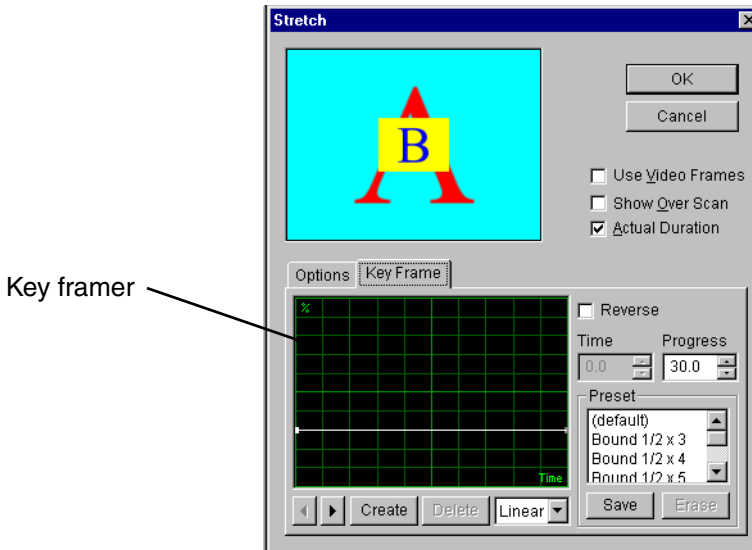
Keyframing the *Stretch* transition

STEP 9: Click the *Options* tab and select the center window transition.

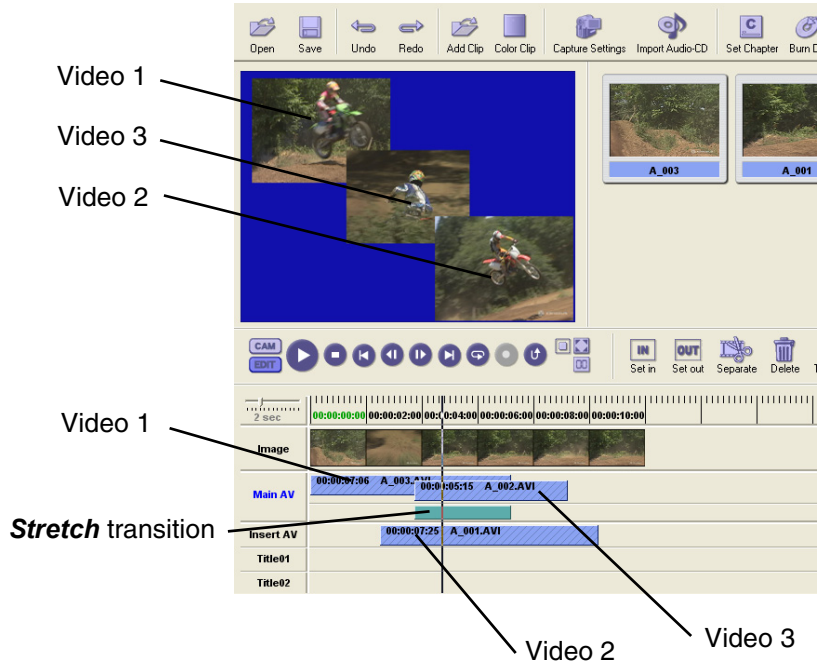
STEP 10: Click the *Key frame* tab and click *Create* to add a key frame. Drag this keyframe to the left side of the graph. In the *Progress* text box type in *50.0*.

STEP 11: Click *Create* and add another key frame. Drag this keyframe to the right side of the graph. In the *Progress* text box type in *50.0*. Click *OK*.

STEP 12: When the transition dialog closes lengthen the transition (pull the left side of the transition block) to the full length of the first clip in *MainAV*.



Chapter 7 : Techniques



Tips

All Let's EDIT transitions are keyframeable. Experiment with the keyframing options to achieve more complex effects.

Animated, Keyed Title

In this example a title comes zooming in.



Setting up the title

STEP 1: Create a 5-second 'black' color clip and drag it into MainAV.

STEP 2: Use the Let's EDIT 2 titling tool to add a title. In the example we used a white title with a gray edge. *Note: Using a gray edge helps to luma key the title in the next steps.*

Creating a title AVI file

STEP 3: When you have finished your title create an AVI file, *File > Create AVI file from timeline.*

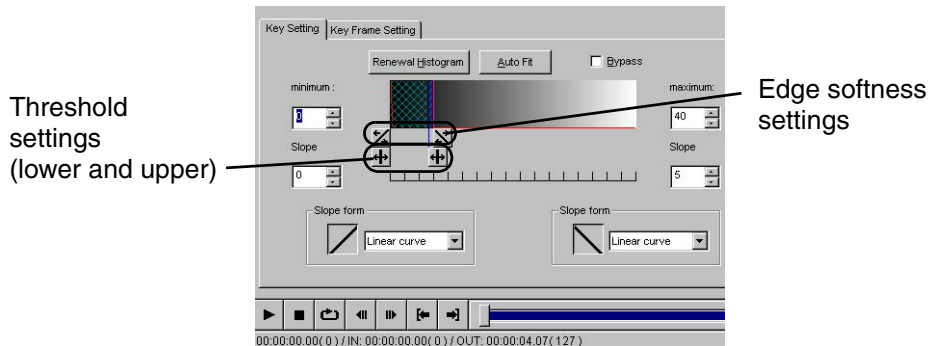
Adding the zoom effect

STEP 4: Clear the timeline and add a new video clip to the MainAV.

STEP 5: Drag the title AVI into InsertAV.

Chapter 7 : Techniques

STEP 6: Right click on InsertAV and select *Luminance key*. When the dialog opens adjust the *threshold* and *edge softness* to your liking. Click *OK*.

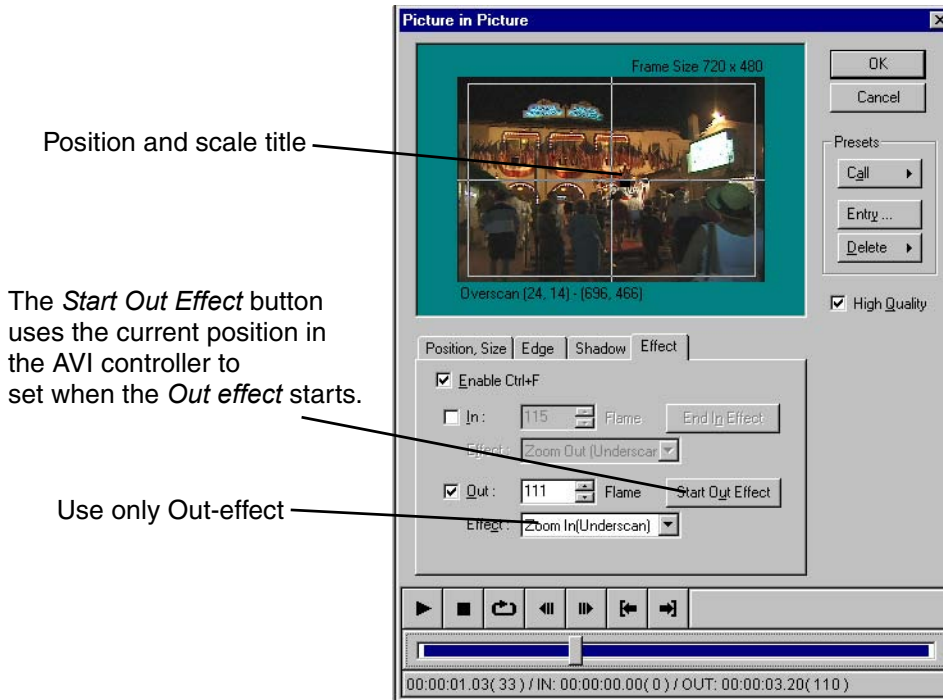


STEP 7: Click on *P-in-P* and select *Setup*.

STEP 8: Position the clip to the beginning and decrease the size of the video window until you can barely see it. In the example we moved the title onto a sign in the background.

STEP 9: Select the *Effect* tab and click *Enable*.

STEP 10: Click on *Out* (do not enable *In*) and select *Zoom In (Underscan)*. After selecting the effect click the *Start out effect* button.



Animated, Keyed Logo

In this example a company logo is keyed into a video clip.



STEP 1: Drag a video clip into the MainAV timeline.

STEP 2: Drag a keyable graphic into the InsertAV timeline. 'Keyable' refers to a graphic, which has been prepared to show video through a constant, or a range of luma value. When you want to key a logo over a video clip make sure that everywhere you want video to show is black on the graphic. Also make sure there is no black in the graphic you want to show.

Creating the Composite

STEP 3: Right-click on the InsertAV timeline and select *Video Filter*.

STEP 4: When the *Video Filters* dialog opens click on the *Luminance Key* button and select *Setup*.

STEP 5: Slide the right *Threshold slider* to the right. You will notice that the video in MainAV starts to show through the wherever there is black in your logo graphic. You can adjust the lower and upper threshold until you have a clean key. Use the softness sliders to fine tune and blur your keyed edges.

Reversed Key

In this example a full screen font scrolls across the screen revealing video as the font 'color'. The background is black.



Setting Background Color

STEP 1: From the toolbar create a 5-second, black color clip.

STEP 2: Drag the color clip into the MainAV timeline.

Adding a Scrolling Title

STEP 3: Click the *Titling* icon from toolbar and type in "AIR-SHOW". Select a bold font and set the size to 200 and the color to *white*.

STEP 4: The title does not fit on screen because of the large font size. Drag the title just off the right side of the window. Click *Center V* to center the title vertically on the page.

STEP 5: Click on the *motion* tab and set the *Out motion* to *Slide Left A* and the time to 5 seconds. Set the *In motion* and *Hold* duration both to 0. This will make the title slide right to left on the screen.

STEP 6: Click *OK*.

STEP 7: Play the timeline to make sure a white title scrolls across the screen.

Create an AVI

STEP 8: Once you are satisfied with the movement save the timeline as an AVI file. Click *File >Create AVI from Timeline > [filename]*

Creating a Composite

STEP 1: Start a new Let's EDIT 2 session, *File >New (save the existing job for future use)*.

STEP 2: Add a clip to the MainAV timeline. In our example we used a video clip of a fire.

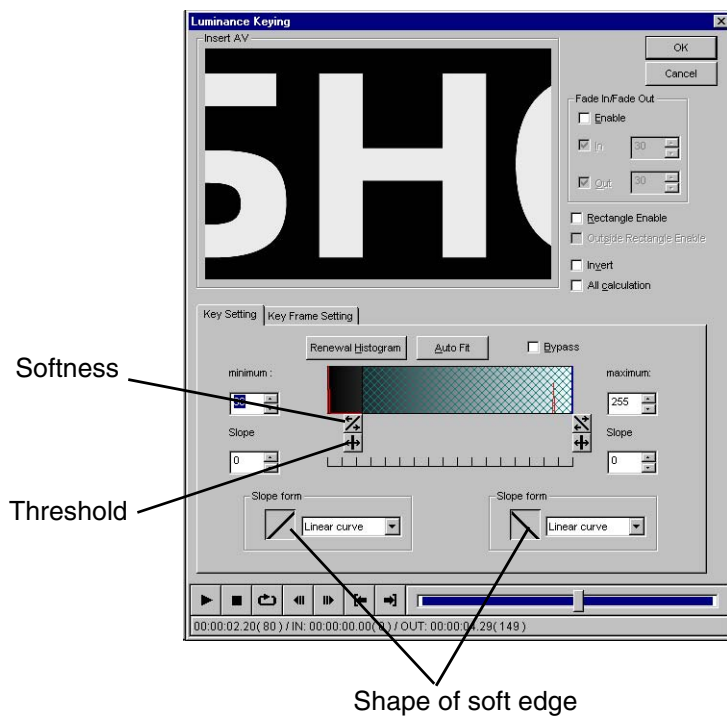
STEP 3: Open the file you created in Step 8.

STEP 4: Drag the file into the InsertAV timeline.

STEP 5: Right-click on the InsertAV timeline and select *Video Filter*.

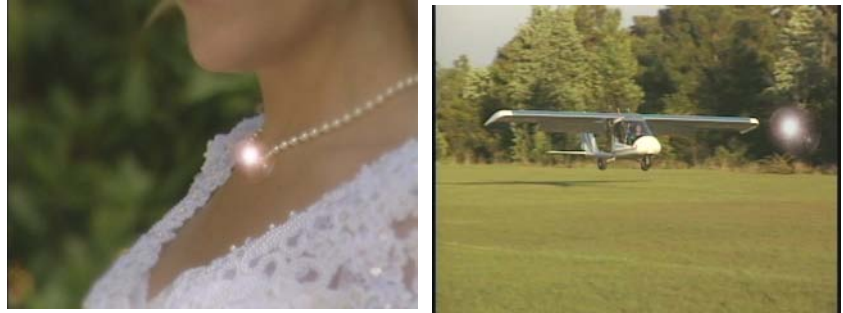
STEP 6: When the *Video Filters* dialog opens click on the *Luminance Key* button and select *Setup*.

STEP 7: Click on *Invert* to luma key on white instead of black. Slide the right *Threshold* slider to the right. You will notice that the video in MainAV starts to show through the white title. You can adjust the lower and upper threshold until you have a clean key. Use the *Softness* sliders to fine tune and blur you keyed edges.



Adding a Keyed Sparkle

In this example a black and white lens flare created in Adobe PhotoShop is keyed into a clip and animated with P-in-P. The final effect shows a sparkle on a pearl necklace.



PhotoShop (or any paint program)

STEP 1: Create a black and white sparkle and save it as a 24 bit BMP. To maintain the proper shape, you should save the graphic as 640x480.

Let's EDIT 2

STEP 2: Bring the sparkle graphic into the DVBin.

STEP 3: Put a video clip into MainAV. Preferably a clip which has an object you would like to "sparkle".

STEP 4: Drag the sparkle into the InsertAV timeline.

STEP 5: Right-click on the InsertAV and select *Luminance Key*. Adjust the threshold and smoothing until the effect looks like a sparkle over the MainAV video. Click *OK*.

STEP 6: When the effects dialog returns, click *P-in-P*.

STEP 7: Drag and size the sparkle over the desired area.

Animated Mosaic

In this example an animated mosaic window conceals the faces of two people. This is useful in police video productions where confidentiality is important.



STEP 1: Drag a video clip with the 'subject' to be concealed into MainAV.

STEP 2: Right click on MainAV and select *Region* and click on *Setup*.

STEP 3: When the setup window opens position the slider to the beginning of the clip.

STEP 4: Select Mosaic as the Inside filter.

STEP 5: Position and size the region bounding box over the area you want to conceal.

STEP 6: Click on the *Moving Path* tab and enable *Moving Path*.

STEP 7: Click *Add* to add a keyframe position to the region bounding box.

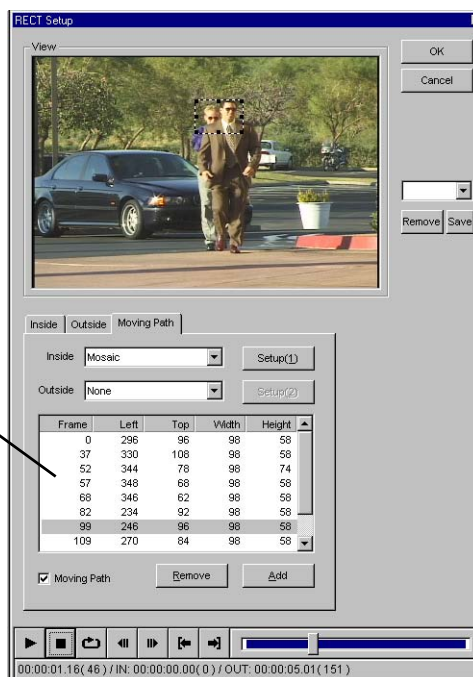
STEP 8: Use the clip controller to move through the clip and reposition the region as needed. Make sure to click *Add* when

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you have moved the region. This will enable you to mask out the concealed area dynamically in case the person or object moves. When you are finished click **OK**.

Scroll through the video using the navigation controller. When the subject moves, move the **Region** accordingly and click **Add**. When the effect is finished the **Region** will move with the subject.

Keyframe list



Tips

To refine your region movements you can go back and add keyframes. These new keyframes will be added automatically to your animation.

Motion Blur

In this example a moderate motion blur is applied to a waterfall and a fire.



STEP 1: Record a waterfall or running water. The best result to this effect is to frame a moving object (water) within a still border (rocks), i.e. creek sides and moving water. The effect softens the water as it flows.

STEP 2: Capture this footage into your PC and drag the video clip into the MainAV timeline.

STEP 3: Right-click on the MainAV timeline and select *Video Filter*.

STEP 4: When the *Video Filters* dialog opens double-click on *Motion Blur*. Click *Setup* and set the *Motion Blur* ratio to 90.

STEP 5: Click *OK*.



Tips

The motion blur effect is very effective with “zoomed in” video clips. Use a tripod and manually zoom in to an object. By applying a motion blur to this video you will have a “hyper space” look.

Animated Bitmaps

In this example clip art is combined with two transitions.



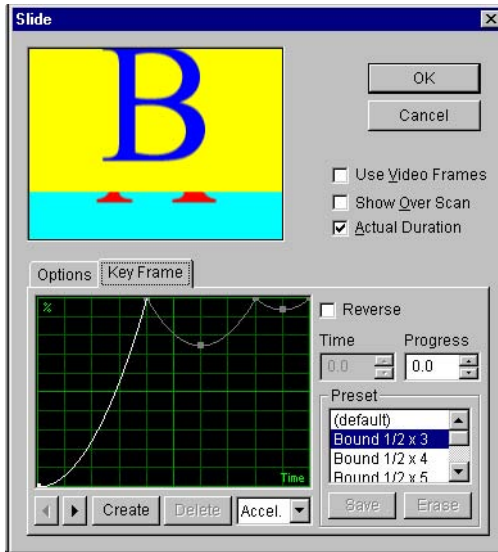
Setting up the basketball bounce

STEP 1: Create a 5-second black color clip and drag it into MainAV.

STEP 2: Drag the clip art into the MainAV following the black color clip. In the example we have a picture of a basketball on a black background.

STEP 3: Right-click on the separation between the two clips and add a *Slide* transition.

STEP 4: Configure the slide transition to incorporate a top-down bounce. To do this, first select the downward slide and then click on the *Keyframe* tab and select *Bound* $\frac{3}{4} \times 3$.



Create an AVI file

STEP 5: When you have finished your transition create an AVI file from the timeline. (*File > Create AVI file from timeline*)

Adding the bouncing basketball to a transition

STEP 6: Clear the timeline and add two new video clips to the MainAV.

STEP 7: Add a 5-second *Slide* transition between the two clips.

STEP 8: Drag the black/basketball AVI into InsertAV.

STEP 9: Right-click on InsertAV and select *Luminance key*. When the dialog opens adjust the threshold and edge softness to your liking. Click *OK*. When the transition plays the basketball will bounce when the video in MainAV slides from A to B.

Adding a golf ball to the tee-off shot

In this example we used a clip of a person teeing off. When the real ball is hit a bitmap of a golf ball zooms out of the scene.

Graphic of golf ball zooming out from tee-shot

STEP 1: Drag in the golf clip into MainAV.

STEP 2: Drag in a golf ball picture into InsertAV.

STEP 3: Right click on the InsertAV and select *Luminance key*. Adjust the threshold and softness. Click *OK*.

STEP 4: Click on *P-in-P* and drag the golf ball to the tee.

STEP 5: Select the *Effect* tab and click *Enable*.

STEP 6: Scrub through the video to when the golfer swings through the tee. Click *Start out effect* and select *Zoom in* as the effect. Click *OK*.

Golf ball sliding off with a Slide transition

STEP 7: Drag another video clip after the second video clip and insert a *Slide* transition. This time use the default *Slide* setting.

STEP 8: Stretch the golf ball graphic duration in InsertAV to just after the 2nd Slide transition on MainAV.

STEP 9: Right-click on the InsertAV and select *P-in-P*.

STEP 10: Move the controller a few frames before the *Slide* transition in MainAV. Click on *Start Out effect* and select *Slide* as the effect. Click *OK*.

Multiple Animated Titles

In this example 5 tracks of titles incorporate independent movement.



Creating 5 titles tracks with different text and movements.

STEP 1: Create a 5-second color clip

STEP 2: Drag the color clip into the MainAV timeline.

STEP 3: Add a title by clicking on the titling icon on the toolbar.

STEP 4: In the sample video the titles scroll across the screen. To do this position the title off the right side of the titling window and select *Slide Left* for the *Out motion*. Set the *Out-motion* time to 5 seconds. Set the *Hold* and *In- motion* time to 0.

STEP 5: Repeat steps 3 and 4 for 4 new title tracks with varying movements.

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Color clip



5 title tracks

Animated Titles with Motion Blur Effect

In this example 5 tracks of titles incorporate independent movement with motion blur.



Creating 5 titles tracks with different text and movements.

STEP 1: Create a 5-second color clip

STEP 2: Drag the color clip into the MainAV timeline.

STEP 3: Add a title by clicking on the titling icon on the tool-bar.

STEP 4: In the sample video the titles scroll across the screen. To do this position the title off the right side of the titling window and select *Slide Left* for the *Out motion*. Set the *Out-motion* time to 5 seconds. Set the *Hold* and *In- motion* time to 0.

STEP 5: Repeat steps 3 and 4 for 4 new title tracks with varying movements.



Tips

This effect can be used over a video clip. To do this use a black background in Step 1 and apply Luminance Keying to key out the black. Alternatively, you can apply Chromakey to key out a specific color.

Creating a title AVI

STEP 6: When you have finished your titles select *Create AVI from Timeline* from the *File* pull-down menu.

Adding a Video Effect to Moving Titles

STEP 7: Create a new Let's EDIT 2 session and open the title AVI you just created. Drag the AVI into the timeline.

STEP 8: Right-click on the video clip and select *Video Filter*.

STEP 9: Double-click on *Motion Blur* and set the *Ratio* to 50. Click *OK*.

Simulated DEA Takedown

In this example filters are applied to give the effect of a DEA helicopter filming a drug bust using night vision equipment.



Setting up color correction

STEP 1: Drag a video clip into MainAV.

STEP 2: Right-click on MainAV and double-click *Color correction* in the *Video filters* dialog.

STEP 3: Click on the color config rectangle and *Load* the *monochrome* preset.

STEP 4: Darken the video by sliding the brightness down.

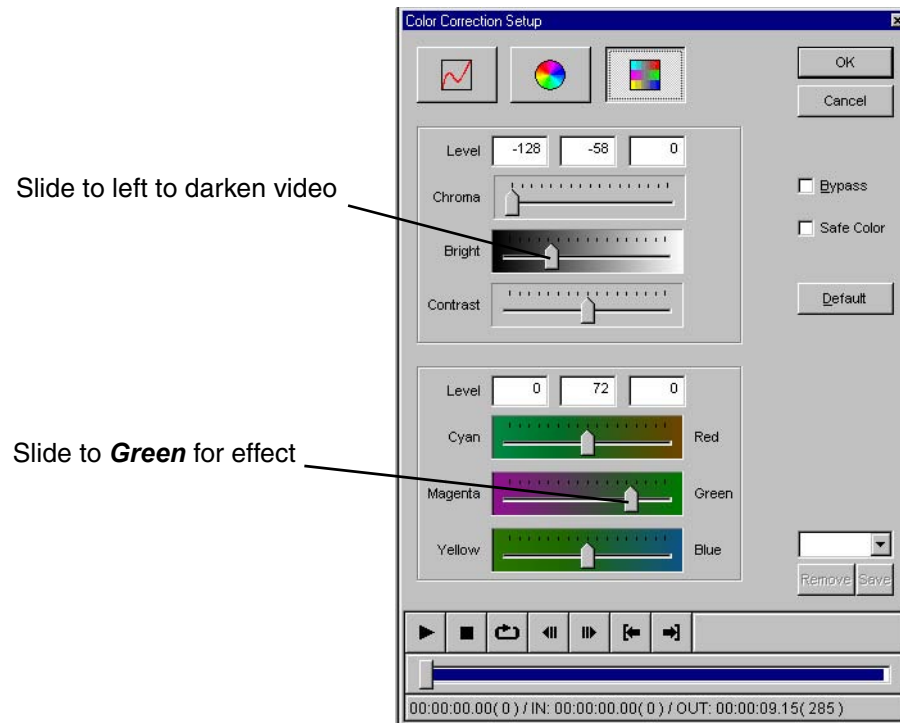
STEP 5: Add a green hue to the video by sliding the Magenta color slider to the right (green). Click *OK*.

Setting up the highlight region

STEP 6: Right-click on MainAV and double-click on *Region*.

STEP 7: Position the scrollbar to the beginning of the clip and click the *Outside* tab.

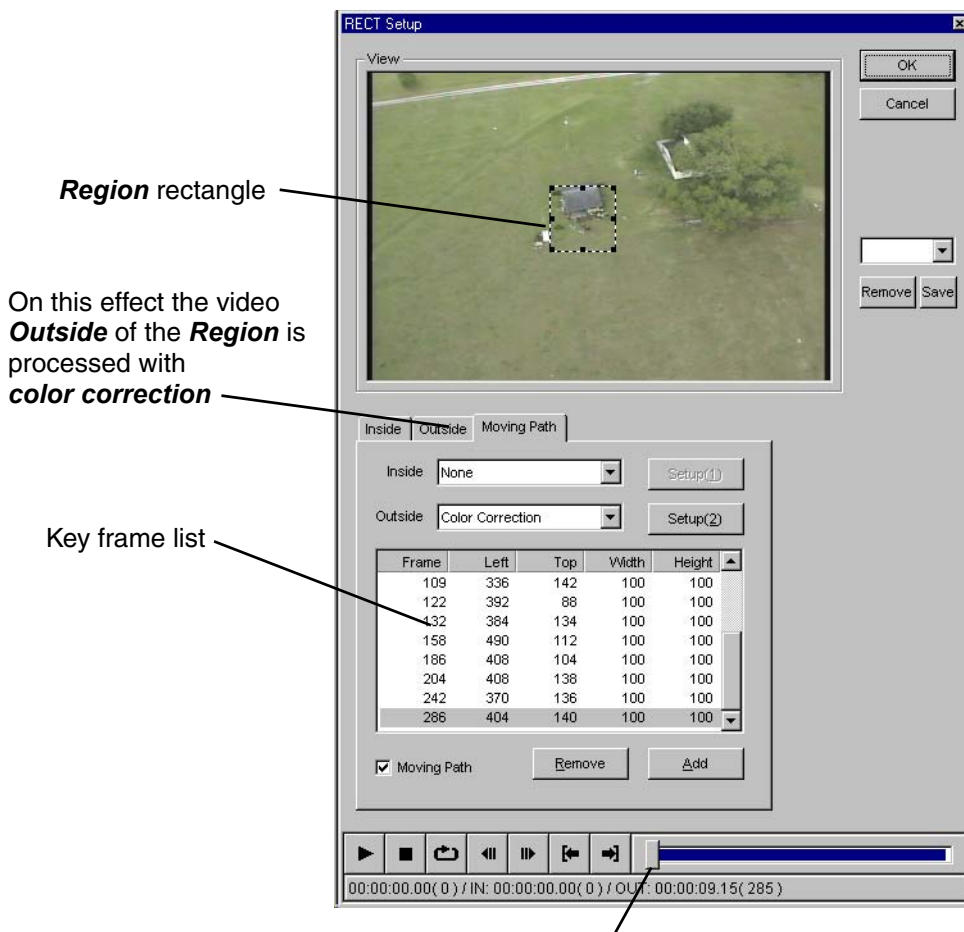
STEP 8: Select *Color correction* as the *Outside* effect. Click *Setup* and darken the video so the selected (Inside) region is brighter.



STEP 9: Select the *Moving path* tab and position the region over the area you want to highlight. Once you have positioned the highlight click *Add*.

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STEP 10: Move a few frames into the clip and reposition/resize the region, click **Add**. Repeat this step for the duration of the clip.



Tips

The Region filter can be animated and sized using any supported effect inside or outside the marked region.

As you move the AVI controller frame by frame position the **Region** rectangle and click **Add**. This will create a key frame.

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